

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☒GAS
WELL ☐OTHER ☐SINGLE
ZONE ☐MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

American Hunter Exploration Ltd.

3. ADDRESS OF OPERATOR

700, 435 Fourth Avenue S.W.

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)

At surface

Calgary, Alberta, Canada T2P 3A8

NW NE Sec. 19, T30S, R5E

At proposed prod. zone 1015' FNL and 1540' FEL of Sec. 19

14. DISTANCE IN MILES SAME DIRECTION FROM NEAREST TOWN OR POST OFFICE*

15 miles SE of Teasdale, UTAH

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.

1015'

(Also to nearest drig. unit line, if any)

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

None

16. NO. OF ACRES IN LEASE

2985.71

19. PROPOSED DEPTH

4363

17. NO. OF ACRES ASSIGNED
TO THIS WELL

160

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

GR 8653'

22. APPROX. DATE WORK WILL START*

Within 2 weeks of
approval.

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
20"	16"	Conductor	60'	75 sx.
13 3/4"	9 5/8"	36# K55 LTC	650'	400 sx.
8 3/4"	5 1/2"	17# K55 LTC	4363'	800 sx.

1. Drill 20" hole to 60 feet and set 60 feet of 16" conductor pipe.
2. Drill 13 3/4" hole to 650 feet and set 9 5/8" casing and cement to surface.
3. Drill 8 3/4" hole to T.D. Two cores and two DST's are anticipated.
4. Log and run 5 1/2" production casing if productive, or plug and abandon.

See 10 point program for details.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

Robert L. Smith

TITLE Senior Drilling Engineer

DATE

Oct. 21/83

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

DISTRICT MANAGER

APPROVED BY

TITLE

DATE

11/23/83

CONDITIONS OF APPROVAL, IF ANY:

CONDITIONS OF APPROVAL ATTACHED

FLARING OR VENTING OF
GAS IS SUBJECT TO NTL 4-A
DATED 1/1/80

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. U-47729
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		6. IF INDIAN, ALIOTTEE OR TRIBE NAME n/a
2. NAME OF OPERATOR American Hunter Exploration Ltd.		7. UNIT AGREEMENT NAME None
3. ADDRESS OF OPERATOR 700, 435 Fourth Avenue S.W. Calgary, Alberta, Canada T2P 3A8		8. FARM OR LEASE NAME Lion Mountain
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) AT SURFACE NW NE Sec. 19, T30S, R5E 1015' FNL and 1540' FEL of Sec. 19 At proposed prod. zone Same		9. WELL NO. #1
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 15 miles SE of Teasdale, UTAH		10. FIELD AND POOL, OR WILDCAT Wildcat ✓
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. 1015' (Also to nearest drilg. unit line, if any)		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 19 T30S R5E
16. NO. OF ACRES IN LEASE 2985.71		12. COUNTY OR PARISH Wayne
17. NO. OF ACRES ASSIGNED TO THIS WELL 160		13. STATE UTAH
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. None		20. ROTARY OR CABLE TOOLS Rotary
21. ELEVATIONS (Show whether DF, RT, GR, etc.) GR 8653'		22. APPROX. DATE WORK WILL START* Within 2 weeks of approval.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
20"	16"	Conductor	60'	75 sx.
13 3/4"	9 5/8"	36# K55 LTC	650'	400 sx.
8 3/4"	5 1/2"	17# K55 LTC	4363'	800 sx.

1. Drill 20" hole to 60 feet and set 60 feet of 16" conductor pipe.
2. Drill 13 3/4" hole to 650 feet and set 9 5/8" casing and cement to surface.
3. Drill 8 3/4" hole to T.D. Two cores and two DST's are anticipated.
4. Log and run 5 1/2" production casing if productive, or plug and abandon.

See 10 point program for details.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED [Signature]

TITLE Senior Drilling Engineer DATE 10/24/83

(This space for Federal or State office use)

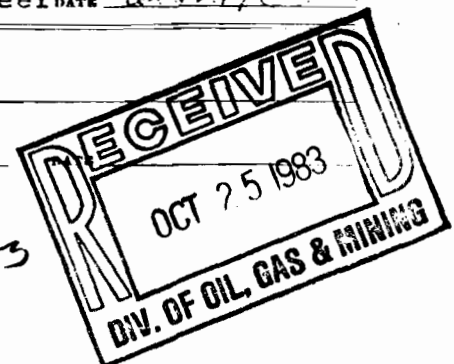
PERMIT NO. _____

APPROVAL DATE _____

APPROVED BY _____

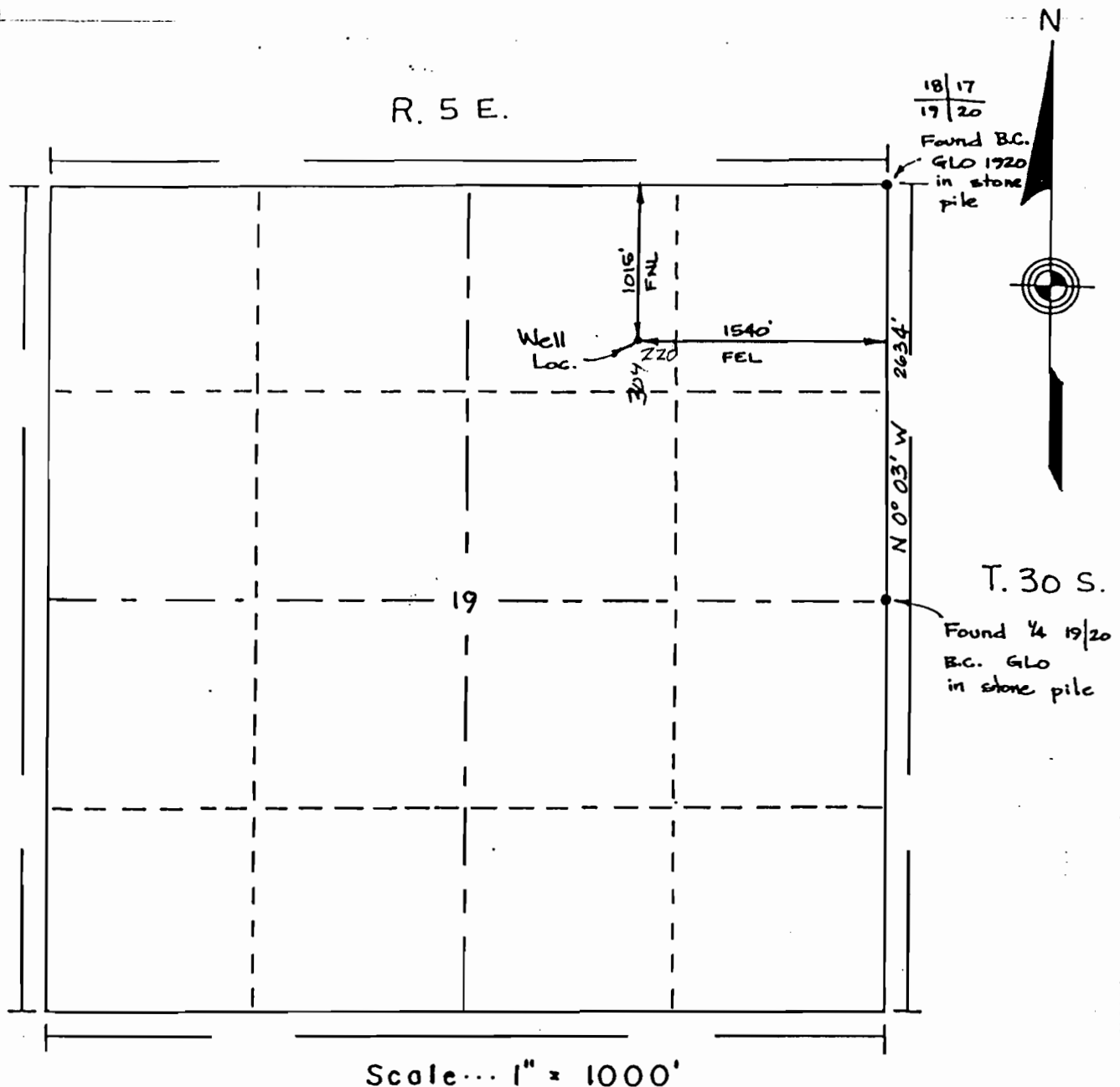
TITLE _____

CONDITIONS OF APPROVAL, IF ANY: _____





FORM F-106

EXHIBIT "A"
Survey Plan

Powers Elevation of Denver, Colorado
has in accordance with a request from BEN MEULENBELD
for AMERICAN HUNTER EXPLORATION LTD.
determined the location of LION MOUNTAIN 19-1
to be 1015' FNL & 1540' FEL of Section 19 Township 30 South
Range 5 East of the SALT LAKE Meridian
WAYNE County, UTAH

I hereby certify that this plat is an
accurate representation of a correct
survey showing the location of

Date: SEPT. 12, 1983

T. T. T. T.
Licensed Land Surveyor No. 2711
State of UTAH

UICKY

- Utah

DESIGNATION OF OPERATOR

The undersigned is, on the records of the Bureau of Land Management, holder of lease

DISTRICT LAND OFFICE: Salt Lake City, Utah
SERIAL NO.: U-47729

and hereby designates

NAME: American Hunter Exploration Ltd.
ADDRESS: 999 18th Street, Suite 315
Denver, CO 80202

as his operator and local agent, with full authority to act in his behalf in complying with the terms of the lease and regulations applicable thereto and on whom the supervisor or his representative may serve written or oral instructions in securing compliance with the Operating Regulations with respect to (describe acreage to which this designation is applicable): U-47729

Township 30 South, Range 5 East
Section 19: All
Wayne County, Utah

It is understood that this designation of operator does not relieve the lessee of responsibility for compliance with the terms of the lease and the Operating Regulations. It is also understood that this designation of operator does not constitute an assignment of any interest in the lease.

In case of default on the part of the designated operator, the lessee will make full and prompt compliance with all regulations, lease terms, or orders of the Secretary of the Interior or his representative.

The lessee agrees promptly to notify the supervisor of any change in the designated operator.

ATTEST:

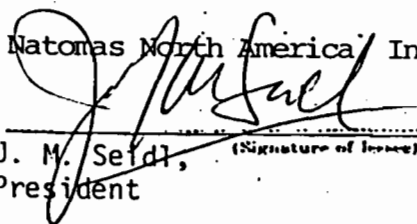
BY:


Asst. Secretary

10/19/83

(Date)

Natomas North America, Inc.


J. M. Seidl,
President

(Signature of lessee)

1155 Dairy Ashford, Suite 100, Houston, TX 77079

(Address)

TEN POINT PROGRAM

AMERICAN HUNTER LION MOUNTAIN #1
SEC. 19, T30S, R5E, WAYNE COUNTY, UTAH

[1] SURFACE FORMATION: Carmel

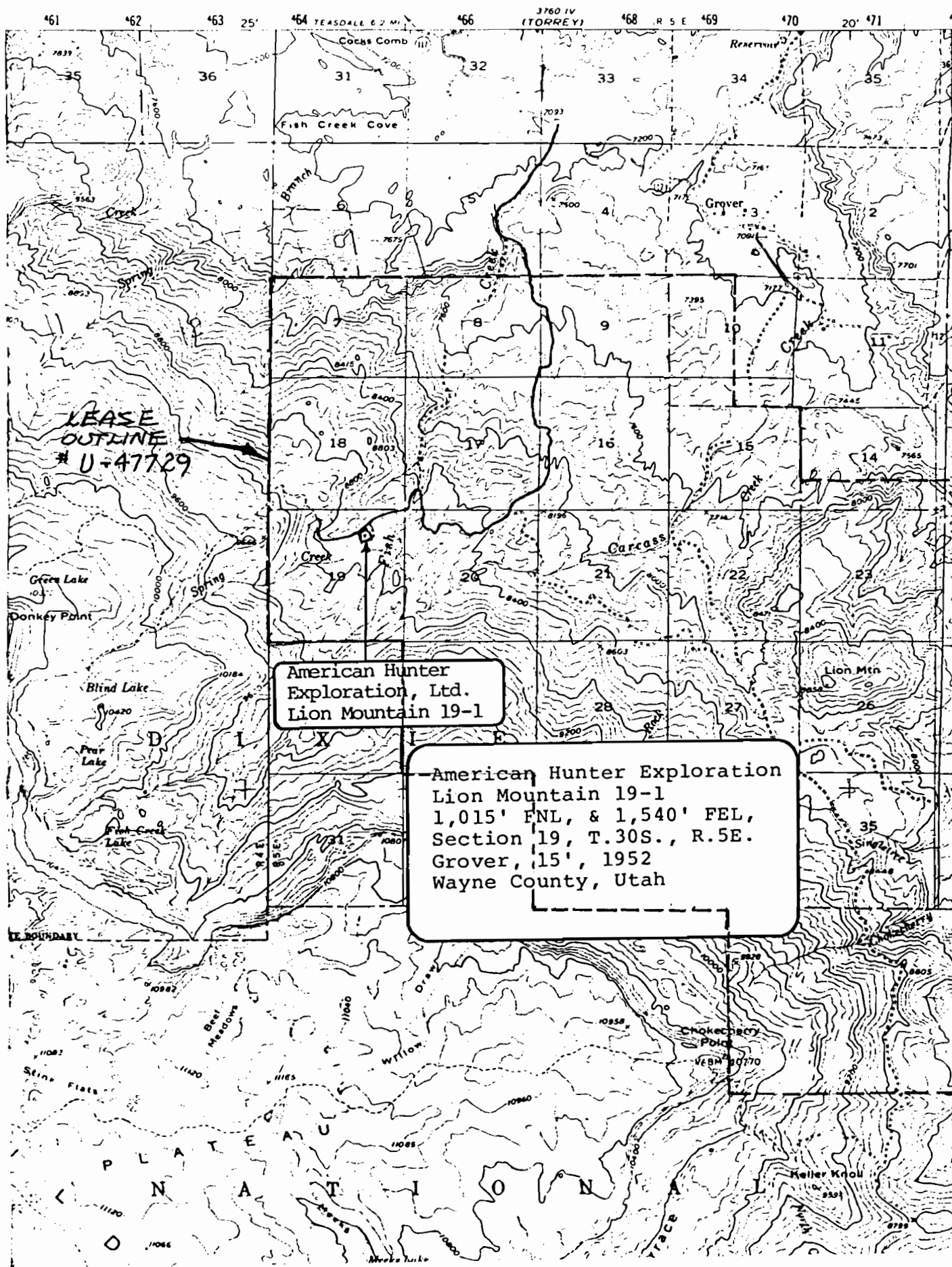
[2] ESTIMATED GEOLOGICAL FORMATION TOPS:

<u>Formation</u>	<u>Estimated Drilling Depth</u>
Surface Till & Carmel	0 Ft.
Navajo SS	778
Kayenta	1778
Chinle	2553
Shinarump	2978
Upper Moenkopi	3023
Sinbad LS	3848
Black Dragon	3933
Kaibab LS	4013
White Rim SS	4173
T.D.	4363

[3] All porous formations are expected to contain water from surface to approximately 2500 feet. From 2500 feet to T.D. there is the possibility of oil, gas or water in any of the porous zones. In particular Shinarump, Sinbad, Kaibab and White Rim formations have had hydrocarbon shows in other wells in this area.

[4] CASING PROGRAM:

<u>Hole Size</u>	<u>Interval</u>	<u>Casing Length</u>	<u>Casing O.D.</u>	<u>Wt., Grade & Coupling</u>	<u>New or Used</u>
20"	0 - 60'	60'	16"	Conductor Pipe	
13 3/4"	60 - 650'	650'	9 5/8"	36#, K55, LTC	New
8 3/4"	650 - 4363'	4363'	5 1/2"	17#, K55, LTC	New



[5] PRESSURE CONTROL EQUIPMENT:

A blow out preventer stack will be rigged up on the surface casing bowl as shown in the attached diagram. The stack will consist of API 10" x 3000 psi working pressure double gate rams and annular preventor. Choke and kill lines will be connected through a mud cross as shown and the choke line will run into a pressure control choke manifold. The choke line and manifold will also be 3000 psi W.P.

The BOP's, choke line, manifold and surface casing will be pressure tested to 2000 psi prior to drilling out the surface casing shoe. The BOP's will be checked daily for the duration of the well to ensure they are functioning properly. The BOP's and casing will be pressure tested again after 30 days if the operation lasts that long.

[6] MUD PROGRAM:

The drilling fluid will be fresh water-gel-chemical mud throughout the surface and main holes. Although relatively low pressures are expected to T.D., approximately 300 sacks of barite will be maintained on location, in case some increase in mud weight is required.

Lost circulation may occur at various depths in the well, and normal plugging agents such as nut plug, mica, sawdust or other fibrous materials may be employed to stop this. If lost circulation is severe, cement plugs may be run.

Adequate stocks of sorptive agents will be on site to handle possible spills of fuel and oil on the surface.

[7] AUXILIARY EQUIPMENT TO BE USED:

- 1) Kelly Cock.
- 2) A drill pipe float will be run whenever the potential for lost circulation is not too great.

- 3) A mud logging service will be used throughout the main hole with equipment to detect any gas entry into the mud. A flo-sho and pit volume monitoring system will be used to detect any influx of formation fluids.
- 4) A full opening stabbing valve that fits the drill pipe tool joints will be maintained on the rig floor at all times.

[8] OPEN HOLE EVALUATION:

- 1) Testing - Two or three open hole DST's are anticipated in the Kaibab, White Rim or other formations depending on samples and other shows.
- 2) Cores are planned for the Kaibab and White Rim formations.
- 3) One logging run is planned at T.D. The logs will include BHCS-GR, FDC-CNL and DIL-SP.

[9] PRESSURES AND SOUR GAS:

No abnormal pressures are expected. In fact all formation pressures are expected to be somewhat lower than a fresh water gradient.

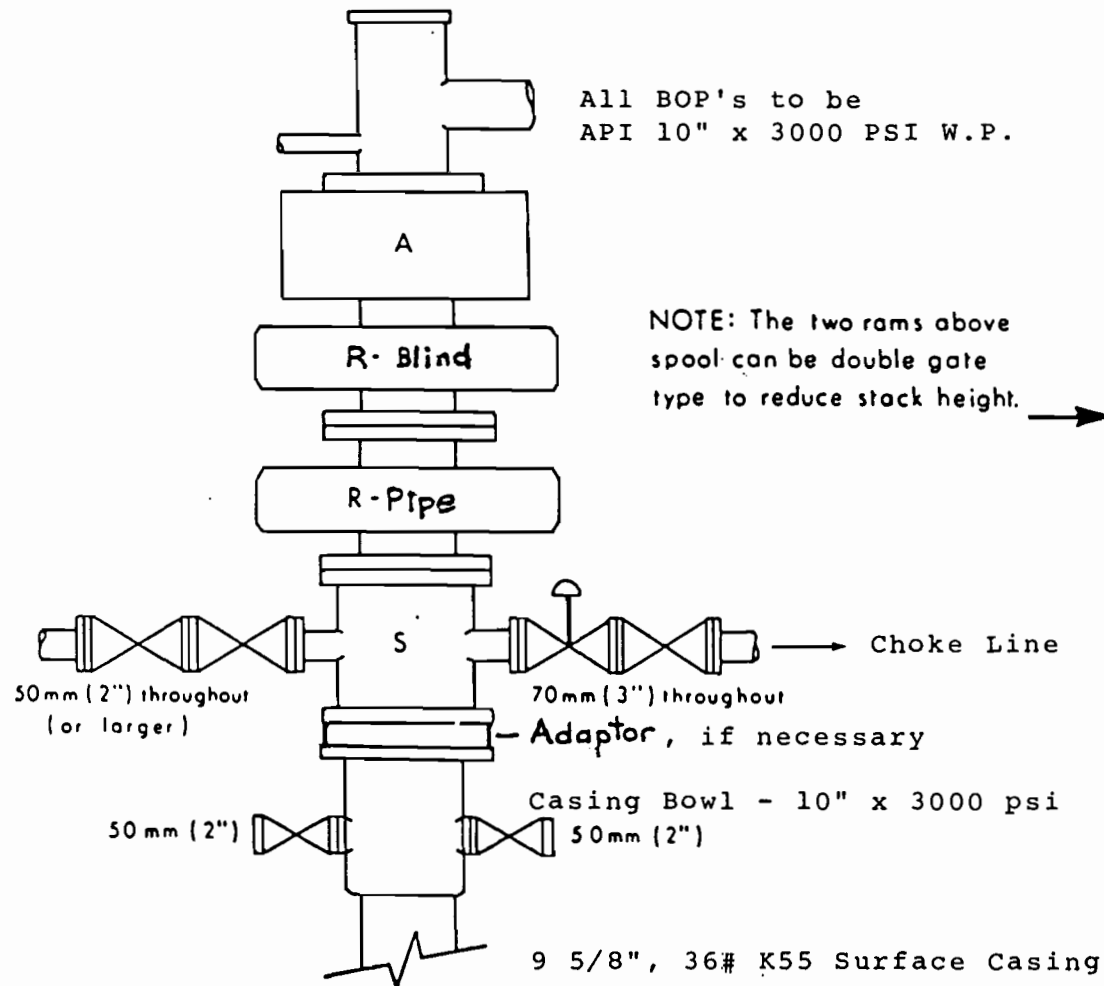
No sour gas or other hazardous fluids have been encountered in these formations in this area.

[10] STARTING DATE AND DURATION:

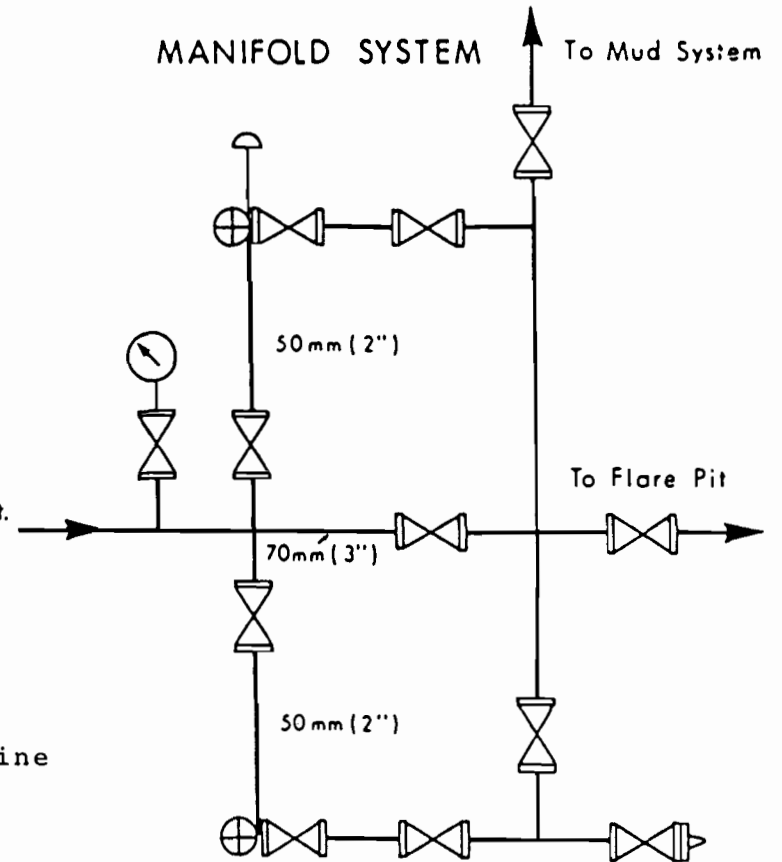
We expect to start the operation within 2 weeks of Government approval. The drilling operation should last about 15 to 20 days.

PRESSURE CONTROL EQUIPMENT DIAGRAM
AMERICAN HUNTER LION MOUNTAIN #1

BLOW - OUT PREVENTION STACK



MANIFOLD SYSTEM



Multipoint Surface Use and Operations Plan

American Hunter Lion Mountain #1
Sec 19, T30S, R5E, Wayne County, Utah

1. Existing Roads

- A. The proposed wellsite has been staked and surveyed as shown in exhibit "A". The details of the drill site location and ground elevations are shown in exhibit "F".
- B. The route to the location is indicated in red on attached map, exhibit "E". Access to the area will be by the North Slope Road, which heads south off the pavement about 2 miles east of Grover. This road is a 14 foot wide gravelled surface and will not require any upgrading. A secondary trail known as Fish Creek Road branches south off the North Slope Road at a point about 5.5 miles from the pavement. The location is about 1500 feet southwest along the Fish Creek Road and is on the north side of the road.
- C. The only new access road required will be a 100 foot entrance from Fish Creek Road onto the location as shown in exhibit "F".
- D. All other roads within a 3 mile radius are shown on the map in exhibit "E".
- E. The 1500 foot section of the Fish Creek Road will require some widening and upgrading in spots. This will be done to Forest Service Standards. Snow removal may be required on the access route. All roads will be restored as necessary.

2. Planned Access Roads

The only access road construction will be the 100 foot entrance from Fish Creek Road shown in exhibit "F".

This will require topsoil to be stripped and piled. Minimum disturbance excavation will be required. The surface will be 14 feet wide and shallow ditches will be cut on each side to build up the surface and provide drainage. Native materials will be used and no material will be hauled in. The maximum grade will be 10%.

No culverts, gates, or cattleguards are required.

3. Location of Existing Wells

There are no existing wells of any kind within the 2 mile radius of the proposed location.

4. Location of Existing and/or Proposed Facilities

- A. There are no existing batteries, production units, gathering lines, or facilities of any kind within a 2 mile radius of the location.
- B. If the well is a producer, surface facilities will be installed in a manner similar to that shown in the attached "Production Facilities Layout", or exhibit "G". All flowlines would be buried and would be within the wellsite pad. It is not expected that additional construction materials would be required from outside the pad area. Any necessary pits would be fenced and flagged to protect stock or wildlife. However, since this is an exploratory well, the exact nature any production and required surface facilities are not known at this time.
- C. Upon completion, whether dry or a producer, all portions of the disturbed area which are no longer required will be rehabilitated in accordance with the Teasdale Range District stipulations.

5. Location and Type of Water Supply

- A. Water will be obtained from the Fish Creek at a point about 300 yards southeast of the drill site and on the south side of the Fish Creek Road, as shown in exhibit "E". This water supply should be ample for our operation and no alternate is planned. The water rights are held by Grover Irrigation Company and negotiations are under discussion to purchase the required amount. A copy of the permit will be supplied to the State of Utah, Division of Oil and Gas prior to spud.
- B. The water will be moved to the location by truck, travelling a few hundred yards on the Fish Creek Road. No other roads are required for water hauling.

6. Source of Construction Materials

- A. No construction materials are required from sources off the drilling site. The top soil from the entrance road and drill pad will be stripped and piled at the south end of the location as in exhibit "F". The native subsoil and excavation from the reserve pit should be adequate to build the pad.
- B. If any materials are required for road maintenance, they will be obtained from an existing gravel pit in section 20, as outlined in the letter from the District Forest Ranger.

7. Methods for Handling Waste Disposal

- 1. Drill cutting will be buried in the reserve pit.
- 2. Drilling fluids will be contained in the reserve pit and evaporated during the summer of 1984. As soon as sufficient evaporation has occurred the remaining solids and cuttings will be buried.

3. Any fluids produced during testing will be collected in tanks or, if necessary, contained in the reserve pit. Any spills on the surface of oil, salt water or fuel will be cleaned up as best as possible and moved into the reserve pit, or removed. If the well is productive, an application will be made with the District Engineer for approval for permanent disposal methods of the produced fluids.
4. Chemical toilets will be used for sewage.
5. All garbage and trash will be burned in a burn pit covered with wire mesh to prevent wind scattering. Any unburned materials left at the end will be either buried or removed to an approved land fill site as required.
6. All trash and unnecessary materials of any kind will be removed from the site soon after the operation is complete. All open pits will be fenced and flagged until they can be backfilled.

8. Ancillary Facilities

No air strip camp or other facilities will be built during this operation.

9. Wellsite Layout and Construction

1. Three cross sections of the required cut and fills are shown in exhibit "H". The Teasdale Range District will be notified 24 hours before construction begins.
2. The location of the rig equipment, reserve pit, burn pit, trailer house and soil stockpile is shown in exhibit "I" and exhibit "F".
3. The reserve pit area will be 105 feet long by 50 feet wide by 10 feet deep. The pit will be lined with Bentonite in order to eliminate any seepage loss.
4. The drilling pad will be constructed in such a way as to ensure that all run off from the location enters the reserve pit.
5. A berm will be constructed on the north edge of the location to act as a buffer to the North Slope Road, as per Forest Services specifications.
6. All construction and rehabilitation will be coordinated with the U.S. Forest Service.

10. Plans for Restoration

1. If the well is abandoned, the site will be restored as nearly as possible to the original condition.
2. The reserve pit will be allowed to dry out by evaporation. Any remaining contaminants or hazardous material will be

removed to an approved dump site. The pit will then be filled and covered with 4 to 5 feet of material.

3. The area will be seeded to grass consisting of Smooth Brome and Intermediate Wheatgrass mixture.
4. After drilling is complete, and until the pit can be back-filled, adequate fencing will be maintained to prevent harm to wildlife.
5. The restoration of the site would commence immediately after rig release, weather permitting. Final restoration should be completed by late summer of 1984.

11. Other Information

1. There were no archaeological, historical or cultural artifacts apparent in a study done for us by Marcia Tate of Powers Elevation. Copies of the reports are available to the District Forest Ranger and the Area BLM office.
2. All the surface involved for both the drilling site and access roads is owned by the U.S. Government. No private owners are involved.
3. There are no occupied dwelling within 3 miles of the wellsite.
4. Drilling should commence within a week of final approval and should last about 20 days.

12. Operator's Representations

The operator of this well is:

AMERICAN HUNTER EXPLORATION
435 4th Avenue, S.W.
Calgary, Alberta T2P 3A8
Canada

The persons responsible for the field operation described herein are:

1. Neil Likely
Manager: Drilling and Completions
(403) 260-1760
2. Don Snyder
Drilling Superintendent
(403) 260-1937
3. Don Myers
Sr. Drilling Engineer
(403) 260-1740

13. Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Sutherland Brothers and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

October, 24, 1983
Date

Donald H. Myers
Sr. Drilling Eng.
Name and Title

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

Dixie National Forest
Teasdale, Utah 84773

2820

October 4, 1983



Mr. Ben Meulenbeld, Senior Landman
American Hunter Exploration Ltd
#700 435-45h Avenue S.W.
Calgary, Alberta, Canada
JsP 3A8

Dear Mr. Meulenbeld:

We have been informed by the B.L.M. that before they can do the Environmental Assessment Report on your proposed well site, we need to send you our mitigating requirements so that you can submit your APD * and then they will complete the E.A.

I have compiled our mitigating requirements. I think we discussed about all of these when we first visited the site. The mitigating requirements are as follows:

1. Access to the proposed site is presently available via the North Slope Road and Fish Creek road into the proposed site. The North Slope Road is constructed to a single lane, 14-foot with turnouts, aggregate surface standard. This road should be satisfactory for exploratory well drilling activities. About the first 1500 feet of the Fish Creek road will be used and will require reshaping and possibly some widening to a 14-foot standard. This road work should be in accordance with "Forest Service Standard Specifications for Construction of Roads and Bridges," 1979 edition. (We have a copy at our office in Teasdale; a summary enclosed.)
2. You will need to ensure that proper coordination occurs between you, the operator, and the owner of the water rights.
3. Use either the existing gravel pit in Section 20, or the proposed drilling site, as a source of fill for road improvement.
4. An impervious lining of the reserve pit will be required, using bentonite or other acceptable material. Ensure the lining remains intact throughout the entire operation.
5. Ensure drilling pad runoff enters the reserve pit, by monitoring and supervising construction of the reserve pit, as well as any ditches or protective berms.

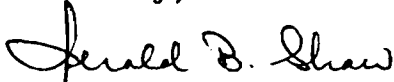
6. You will ensure that the North Slope Road is properly maintained during the project, particularly after inclement weather; and that you, the operator, participates in the maintenance as necessary,
7. Maintain the high bank and a small buffer between the well site and the North Slope road, to preserve aesthetics.
8. The disturbed area should be rehabilitated and reseeded or planted to a grass (Smooth Brome and Intermediate Wheatgrass) mixture as soon as area is in the restoration stages.
9. The reserve pit should be filled or drained as soon as possible to eliminate this hazard to wildlife. You should ensure that at least 4 to 5 feet of cover material is placed over the reserve pit, and that drainage is away from the reserve pit (i.e. cover over the reserve pit should be slightly mounded).
10. Berms of impermeable material or slope should be constructed along the perimeter of the drill site to prevent surface runoff at the site from reaching the North Slope Road, or adjacent drainages.
11. Upon completion of drilling, all pit contents and contaminants will be removed after fluid evaporation to an approved dump site.
12. All construction and rehabilitation operations must be coordinated with the U.S. Forest Service.
13. If the well is abandoned, the site will be restored to the original condition as nearly as possible. If production is obtained, the unused area will be restored as soon as possible. In either case, no depressions will be left that will trap water or form ponds.
14. You are required to include a plat showing the boundaries of the activated oil lease.

We believe that the proposed drill site that has been chosen is an acceptable location for this type of an activity, and feel that we can work together on this project.

* We do not feel that another on-site inspection is necessary and you should proceed with the filing of your APD and include the above mitigating requirements and any others you feel are necessary.

If we can be of any further help contact us at any time.

Sincerely,



JERALD B. SHAW
District Forest Ranger

cc: Pat Stong, BLM Hanksville

MINIMUM GUIDELINES
FOR LOW ENVIRONMENTAL IMPACT, LOW STANDARD MINING ACCESS ROADS

1. All locations for new construction must receive prior Forest Service approval.
2. Keep sustained road gradients below 8 percent.
3. Avoid locating roads on hillsides with cross-slopes greater than 50 percent.
4. Locate roads on hillsides, benches, and ridges to minimize erosion; keep roads out of stream courses.
5. Install culverts or fords at crossings of natural drainages except small streams and seeps which can be safely diverted to ditches. Use culvert large enough to carry maximum flow expected.
6. Space cross-drains at intervals sufficient to prevent excessive accumulation of water in ditch.
7. Route road drainage onto flat natural ground where possible so sediment can be deposited before water reaches stream channels. However, where experience has shown that new erosion channels would result on steep ground, it is better to route the runoff into established channels. Locate cross-drains and culverts where sedimentation can best be controlled.
8. Make cut and fill slopes flatter than 1 1/2 horizontal to 1 vertical to aid revegetation, whenever practical.
9. Install cross-drains and dips on an appropriate skew.
10. Protect erodible fills by use of berm.
11. Except as above, avoid berms where possible, since berms confine water to roadway.
12. Avoid depositing earth materials in stream channels.
13. Avoid ground disturbance outside roadway.
14. Reseed all disturbed areas immediately with appropriate grass species. (Consult with Ranger.)

111° 30'

22° 30'

111° 15'

K

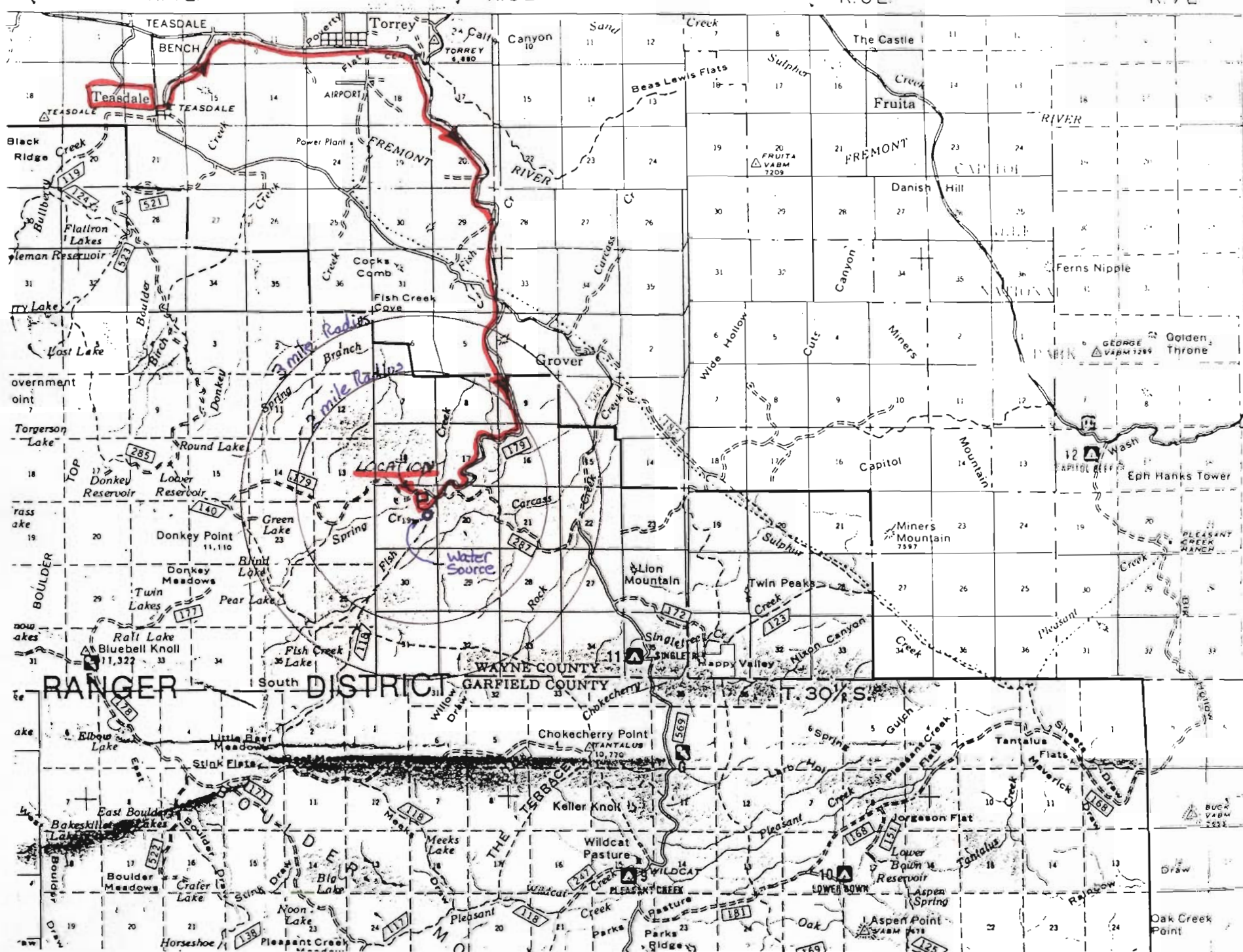
ACCESS ROAD MAP TO LOCATION

R. 4 E

R. 5 E

R. 6 E

R. 7 E



1

T
29
ST
30
S

2

07°
30'T
31
S

Exhibit 1

EXHIBIT F Detailed Drilling Location

AMERICAN HUNTER EXPL'R. LTD.

LION MOUNTAIN 19-1

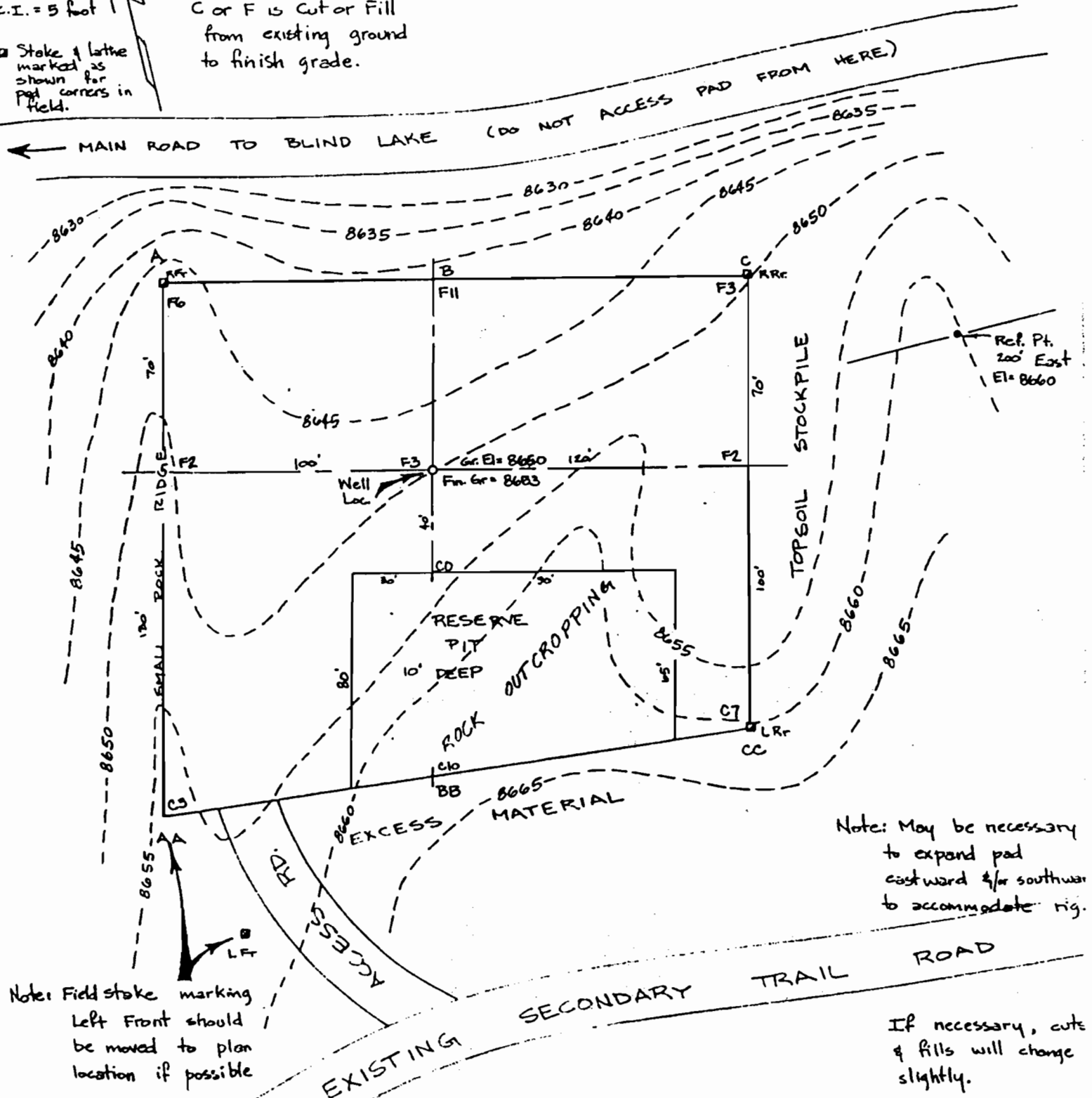
1015' FNL } Sec. 19-T30S-R5E
1540' FEL }

WAYNE Co., UTAH

1" = 30'
C.I. = 5 foot

Stake & lathe
marked as
shown for
pad corners in
field.

C or F is Cut or Fill
from existing ground
to finish grade.



SEPT 13, 1985
E.S. STREMAN

POWERS ELEVATION CO.
RICHFIELD, UTAH

Production Facilities Layout

AMERICAN HUNTER EXPL'R. LTD.

LION MOUNTAIN 19-1

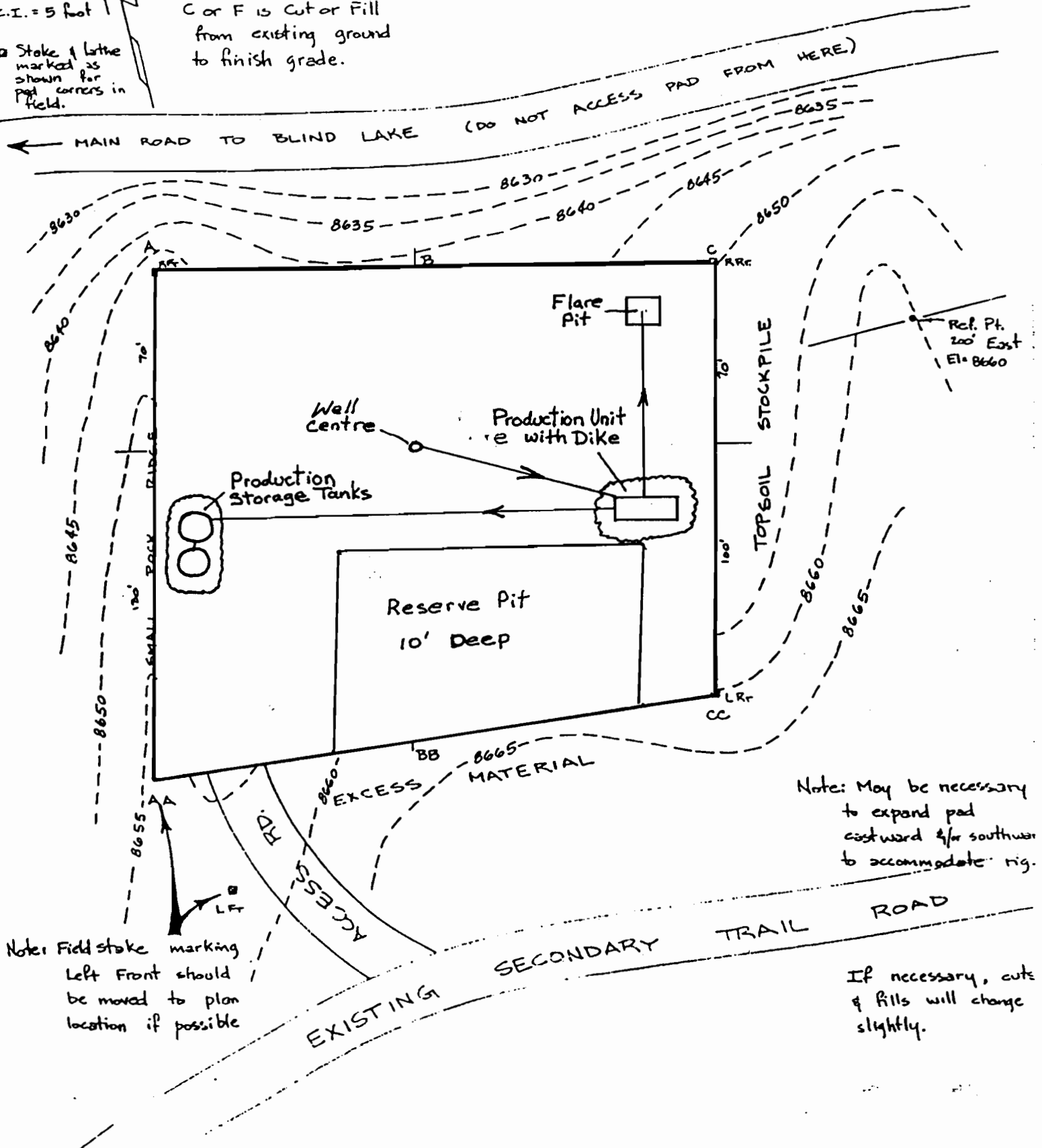
1015' FNL } Sec. 19 T30S R5E
1540' FEL }

WAYNE CO., UTAH

1"=50'
C.I. = 5 feet

Stake & lotter marked as shown for pad corners in field.

C or F is Cut or Fill from existing ground to finish grade.

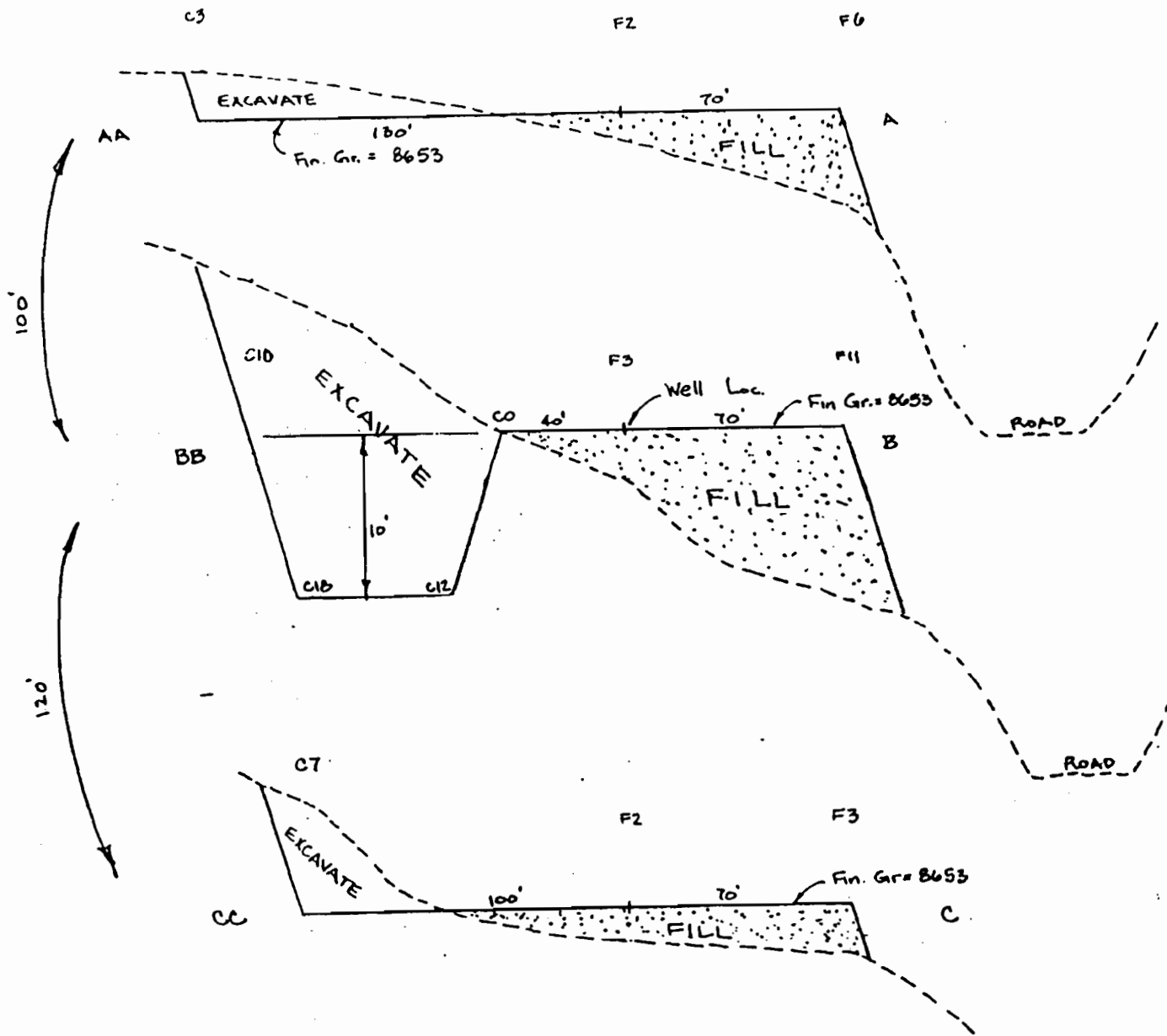


Note: May be necessary to expand pad eastward &/or southward to accommodate rig.

Note: Field stake marking Left Front should be moved to plan location if possible

If necessary, cuts & fills will change slightly.

EXHIBIT "H"
Location Cut &
Fill Cross Secs.



--- Existing ground
— Proposed grade

Scales: 1" = 50' Horiz.
1" = 10' Vert.

C or F is Cut or Fill from
existing ground to finish grade.

All sideslopes @ 1 1/2:1

± 4900 yd³ Cut
± 3900 yd³ Fill

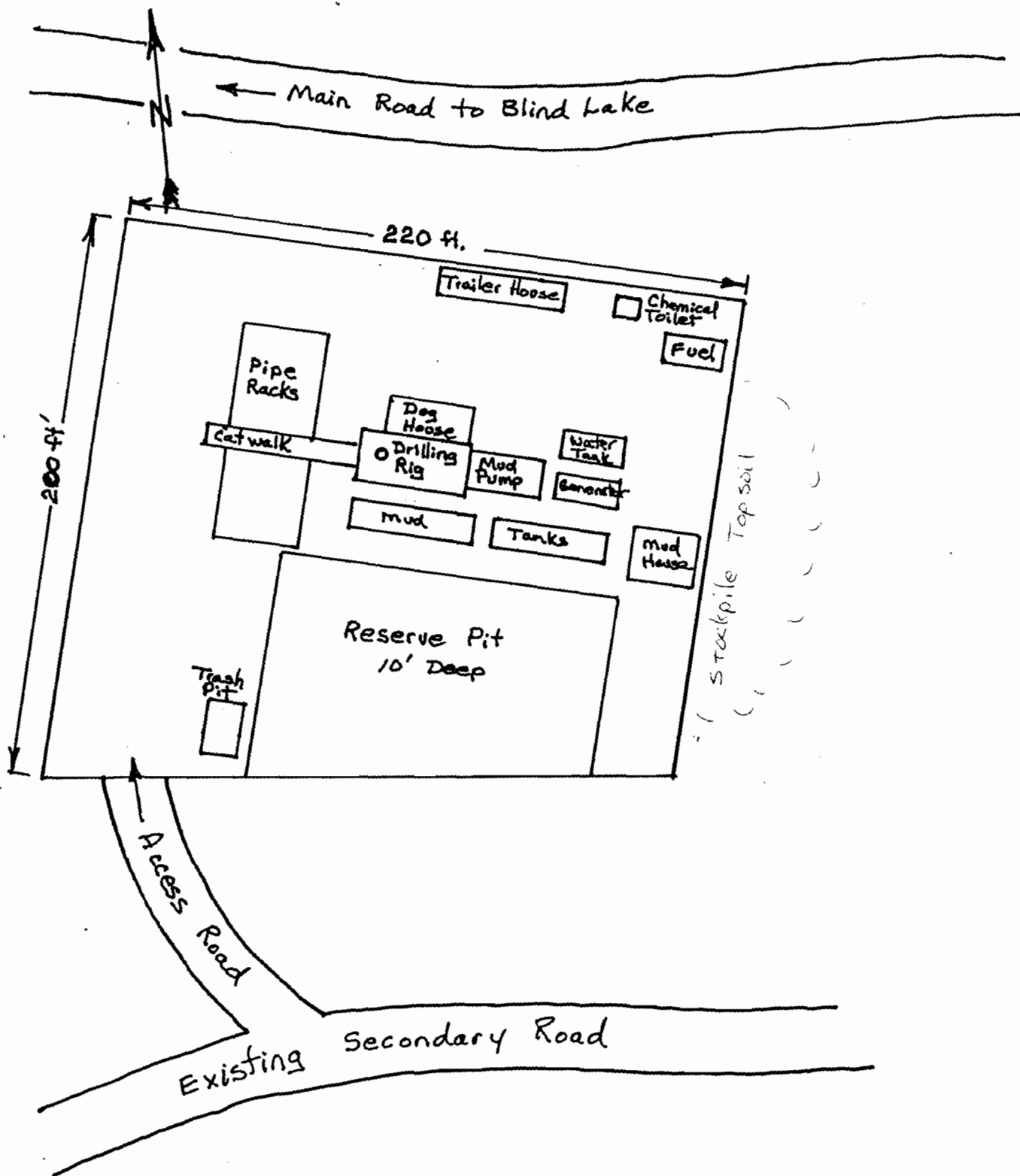
AMERICAN HUNTER EXPLR. LTD.
LION MOUNTAIN 19-1
NW-NE Sec 19-T30S-R5E
WAYNE Co., UTAH

SEPT. 13, 1983
E.S.S.

POWERS ELEVATION CO.
RICHFIELD, UTAH

Drilling Rig layout
American Hunter Lion Mountain #1
Scale 1" = 50 ft.

EXHIBIT "1"
Drilling
Layout



CONDITIONS OF APPROVAL FOR NOTICE TO DRILL

Company American Hunter Exploration Ltd. Well No. Lion Mountain #1
Location NW NE Sec. 19, T30S, R5E Lease No. U-47729

**A COPY OF THESE CONDITIONS SHOULD BE FURNISHED YOUR
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (30 CFR 221), and the approved plan of operations. The operator is considered fully responsible for the actions of his subcontractors. The following items are emphasized:

1. There shall be no deviation from the proposed drilling and/or workover program as approved. Safe drilling and operating practices must be observed. All wells, whether drilling producing, suspended, or abandoned shall be identified in accordance with 30 CFR 221.22. Any changes in operations must have prior approval of this office. Pressure tests are required before drilling out from under all casing strings set and cemented in place. Blowout preventer controls must be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to insure good mechanical working order, and this inspection recorded on the daily drilling report. Preventers will be pressure tested before drilling casing cement plugs. All BOP pressure tests must be recorded on the daily drilling report.
2. All shows of fresh water and minerals will be reported and protected. A sample will be taken of any water flows and furnished this office for analysis. All oil and gas shows will be adequately tested for commercial possibilities, reported and protected.
3. No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of this office. If operations are to be suspended, prior approval of this office must be obtained and notification given before resumption of operations.

In the event abandonment of the hole is desired, an oral request may be granted by this office, but must be timely followed within 15 days with a "Notice of Intention to Abandon" (Form 9-331). Unless the plugging is to take place immediately upon receipt of oral approval, the District Manager must be notified at least 48 hours in advance of the plugging of the well in order that a representative may witness plugging operation. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form 9-331) must be submitted within 15 days after the actual plugging of the well bore, reporting where the plugs were placed, and the current status of the surface restoration. If surface restoration has not been completed at that time, a follow-up report on form 9-331 should be filed when all surface restoration has been completed and the location is considered ready for final inspection.

4. The spud date will be reported orally to the respective District Manager's office within 48 hours after spudding. If the spudding occurs on a weekend or holiday, wait until the following regular workday to make this report.

Periodic drilling progress reports must be filed directly with the District Manager's office on a frequency and form or method as may be acceptable to the District Manager.

In accordance with NTL-1, this well must be reported on Form 9-329 "Monthly Report of Operations", starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report should be filed, in duplicate, directly with Royalty Management Accounting Center, Minerals Management Service, P. O. Box 2859, Casper, Wyoming 82602.

Any change in the program must be approved by the District Manager. "Sundry Notices and Reports on Wells" (form 9-331) must be filed for all changes of plans and other operations in accordance with 30 CFR 221.58. Emergency approval may be obtained orally, but such approval does not waive the written report requirement. Any additional construction, reconstruction, or alteration of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground will require the filing of a suitable plan pursuant to NTL-6, and prior approval by the District Manager.

5. Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (form 9-330) will be submitted not later than 15 days after completion of the well or after completion of operations being performed, in accordance with 30 CFR 221.59. Two copies of all logs run, core descriptions, core analyses, well-test data, geologic summaries, sample descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with form 9-330. Samples (cuttings, fluid, and/or gas) will be submitted only when requested by this office.
6. Significant surface values (are) ~~(are)~~ involved at this location. Accordingly, you (must) ~~(must)~~ notify at least (24) ~~(48)~~ hours prior to commencing field operations to allow this office to have personnel present for consultation during the construction of roads and locations.

Your contact with this office is: Jerry Shaw District Ranger
Office Phone: (801) 425-3435 Home Phone: (801) 425-3415
City: Teasdale State: Utah

District Manager's Office Address and contacts are:

Address: Charles Horsburgh 150 East 900 North Richfield, Utah 84701
District Manager: Don Pendleton Home Phone: (801) 896-6945
Office Phone (801) 896-8221

7. SURFACE OPERATING STANDARDS

Unless otherwise specified herein, construction and maintenance of surface facilities approved under this plan shall be in accordance with the guidelines set forth in the BLM/FS/GS Oil and Gas Brochure entitled, "Surface Operating Standards for Oil and Gas Exploration and Development". This includes but is not limited to such items as road construction and maintenance, handling of top soil and rehabilitation.

8. If a replacement rig is contemplated for completion operations, a "Sundry Notice" to that effect must be filed, for prior approval of the District Manager, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig.
9. Pursuant to NTL-2B requirements regarding disposal facilities for new wells, this is authorization for unlined pit disposal of the water produced from this well for a period of 90 days from the date of initial production for sales purposes. During this period, an application for approval of the permanent disposal method, along with the required water analysis and other information must be submitted for the District Manager's approval. Failure to timely file an application within the time allowed will be considered an incident of noncompliance, and will be grounds for issuing a shut-in order until the application is submitted.
10. This permit is valid for a period of one year from the date of approval. If construction does not commence within 90 days from approval, the operator must contact this office 15 days prior to beginning construction. Construction under adverse conditions may require additional stipulations. If the permit terminates, any surface disturbance created under the application must be rehabilitated in accordance with the approved plan. After termination, it is required that a new application be filed for approval for any future operations.
11. If a tank battery is constructed on this lease, it must be surrounded by a fire wall of sufficient capacity to adequately contain the storage capacity of the battery.
12. This Application for Permit to Drill is approved subject to the requirement that, should the well be successfully completed for production, this office must be notified when it is placed in a producing status. Such notification will be by telegram or other written communication, and must be received in this office by not later than the first business day next following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
 - a. Operator name, address and telephone number.
 - b. Well name and number.
 - c. Well location (1/4, 1/4, Section, Township, Range and Prime Meridian).
 - d. Date was placed in a producing status.
 - e. The nature of the well's production, i.e. crude oil, or crude oil and casinghead gas, or natural gas and entrained liquid hydrocarbons.

- f. The OCS, Federal or Indian lease prefix and number on which the well is located. Otherwise, the non-Federal or non-Indian land category, i.e. State or private.
- g. If appropriate, the unit agreement name, number and participating area name.
- h. If appropriate, the communitization agreement number.

13. _____

SUPPLEMENTAL STIPULATIONS OF APPROVAL ATTACHED

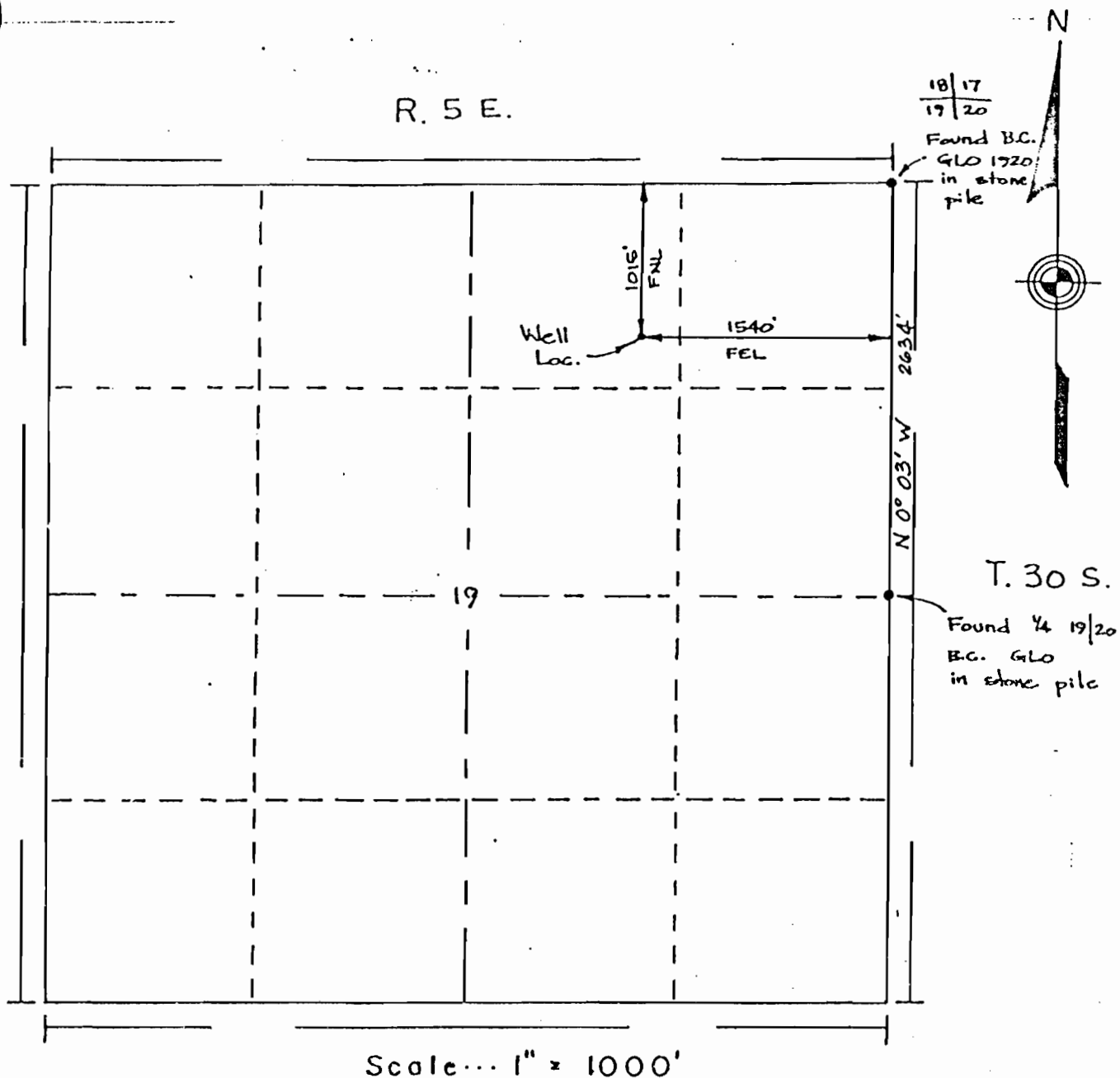
As per letter to Mr. Ben Meulenbeld from the Dixie National Forest on October 4, 1983, the following stipulation is required:

Upon completion of drilling, all reserve pit contents and contaminants will be removed after fluid evaporation to an approved dump site.

ADDITIONAL STIPULATIONS FOR PRODUCTION FACILITIES

Your Application for permit to Drill also included a submittal for production facilities. These production facilities are approved for the lessee and his designated operator under Section 1 of the Oil and Gas Lease with the following conditions:

- (1) The oil and gas measurement facilities must be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries. Tests for meter accuracy are to be conducted monthly for the first three months on new meter installations and at least quarterly thereafter. Please provide this office with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports are to be submitted to the Salt Lake City District Oil and Gas Supervisor. Royalty payments will be made on all production volume as determined by the meter measurements or the tank measurements. All measurement facilities must conform with the API standards for liquid hydrocarbons and the AGA standard for natural gas measurement.
- (2) Gas meter runs for each well will be located within 500 feet of the wellhead. The gas flowline will be buried from the wellhead to the meter and 500 feet downstream of the meter run or any production facilities. Meter runs must be housed and/or fenced.
- (3) All disturbed areas not required for operations will be rehabilitated.
- (4) All produced liquids must be contained including the dehydrator vent/condensate line effluent. All production pits must be fenced.
- (5) The well activity, the well status and the date the well is placed on production must be reported on Lessee's Monthly Report of Operations, Form 9-329.
- (6) All off-lease storage, off-lease measurement, or commingling on lease or off-lease must have written approval.
- (7) All product lines entering and leaving hydrocarbon storage tanks must be locked/sealed.
- (8) You are reminded of the requirements for handling, storing, or disposing of water produced from oil and gas wells under NTL-2B.
- (9) All materials, trash, junk, debris, etc. not required for production must be removed from the well site and production facility site at the completion of these operations.
- (10) A copy of the Gas Sales Contract will be provided to this office and the Royalty Accounting Department as directed.
- (11) Construction and maintenance for surface use approved under this plan should be in accordance with the surface use standards as set forth in the BLM/GS Oil and Gas Brochure entitled, "Surface Operating Standards for Oil and Gas Exploration and Development." This includes, but is not limited to, such items as road construction and maintenance, handling of top soil and rehabilitation.
- (12) "Sundry Notice and Reports on Wells" (form 9-331) will be filed for all changes of plans and other operations in accordance with 30 CFR 221.58. Emergency approval may be obtained verbally, but such approval does not waive the written report requirement. Any additional construction, reconstruction, or alternations of facilities, including roads, gathering lines, batteries, measurement facilities, etc., will require the filing of a suitable plan and prior approval by the survey.



Powers Elevation of Denver, Colorado
has in accordance with a request from BEN MEULENBELD
for AMERICAN HUNTER EXPLORATION LTD.
determined the location of LION MOUNTAIN 19-1
to be 1016' FNL & 1540' FEL of Section 19 Township 30 South
Range 5 East of the SALT LAKE Meridian
WAYNE County, UTAH

I hereby certify that this plat is an
accurate representation of a correct
survey showing the location of

Date: SEPT. 12, 1983

T. T. T. T.
Licensed Land Surveyor No. 2711
State of UTAH

18

17

10353
WD Recon All Min

16

IL
Base Lands

U-47729
X
#1

19

20

21

U47729
OGLse

U 47218
OGLse

30

29

28

OPERATOR American Hunter Exploration DATE 10-26-83
WELL NAME Leon Mtn #1
SEC NWNE19 T 30S R 5E COUNTY Wayne

43-055-30033
API NUMBER

sted
TYPE OF LEASE

POSTING CHECK OFF:

☐

INDEX

☐

MAP

☐

HL

☐

NID

☐☐

PI

PROCESSING COMMENTS:

NO OTHER OIL OR GAS WELLS WITHIN 4960'

APPROVED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING

DATE: 10-27-82

BY: [Signature]

✓ CHIEF PETROLEUM ENGINEER REVIEW:

10/28/83 ✓ exception location ✓

APPROVAL LETTER:

SPACING:

☐

A-3

UNIT

☐

c-3-a

CAUSE NO. & DATE

☐

c-3-b

☒

c-3-c

SPECIAL LANGUAGE:

1- WATER

2- This permit also becomes void unless
a proper request for exception location
is submitted to this office prior to spudding.

☒ RECONCILE WELL NAME AND LOCATION ON APD AGAINST SAME DATA ON PLAT MAP.

☒ AUTHENTICATE LEASE AND OPERATOR INFORMATION

☒ VERIFY ADEQUATE AND PROPER BONDING *FEN*

☒ AUTHENTICATE IF SITE IS IN A NAMED FIELD, ETC.

☐ APPLY SPACING CONSIDERATION

☐ ORDER *NO*

☐ UNIT *N.O.*

☐ c-3-b

☒ c-3-c

☒ CHECK DISTANCE TO NEAREST WELL.

☒ CHECK OUTSTANDING OR OVERDUE REPORTS FOR OPERATOR'S OTHER WELLS.

☒ IF POTASH DESIGNATED AREA, SPECIAL LANGUAGE ON APPROVAL LETTER

☒ IF IN OIL SHALE DESIGNATED AREA, SPECIAL APPROVAL LANGUAGE.

October 27, 1983

American Hunter Exploration Ltd.
700, 435 Fourth Avenue S.W.
Calgary, Alberta, Canada T2P 3A8

RE: Well No. Lion Mountain #1
NWNE Sec. 19, T. 30S, R. 5E
1015' FNL, 1540' FEL
Wayne County, Utah

Gentlemen:

Insofar as this office is concerned, approval to drill the above referred to oil/gas well on said unorthodox location is hereby granted in accordance with Rule C-3(c), General Rules and Regulations and Rules of Practice and Procedure. Prior to spudding, a copy of the Utah Division of Water Rights (Phone No. 801-533-6071) approval for use or purchase of drilling water must be submitted to this office, otherwise this approval is void. This permit also becomes void unless a proper request for exception location is submitted to this office prior to spudding.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

RONALD J. FIRTH - Chief Petroleum Engineer
Office: 533-5771
Home: 571-6068

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling. Your cooperation in completing this form will be appreciated.

Further, it is requested that this Division be notified within 24 hours after drilling operations commence, and that the drilling contractor and rig number be identified.

The API number assigned to this well is 43-055-30033.

Sincerely,

Norman C. Stout
Administrative Assistant

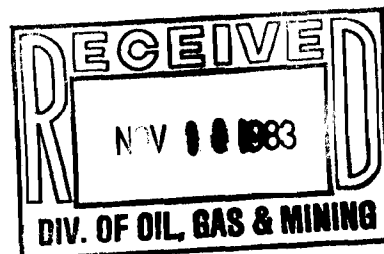
NCS/as
cc: Branch of Fluid Minerals
Encl.

American Hunter Exploration Ltd.
700, 435 - 4th Ave. S.
Calgary, Alberta T2P 3A8
(403) 267-9511

american hunter

November 4, 1983

State of Utah
Division of Oil and Gas
4241 State Office Building
SALT LAKE CITY, Utah 84114
U.S.A.



ATTENTION: Mr. Norm Stout

Dear Mr. Stout:

We are hereby requesting an exception to the State spacing regulation for a potential oil well, which we plan to drill in Section 19, T30S, R5E. This well will be on Federal lands, and I have already provided you with a copy of our Federal application for a drilling permit. A copy of the survey plan is attached hereto and indicates that the location is closer than 500 feet to the boundaries of the NW 40 acres of the NE quarter.

We ask for the exception because of topographic considerations. An inspection of the site was made on September 7, with representatives of the BLM and the Forestry. Due to rough topograph and the location of a live creek and a road within the quarter-quarter, this location was the only possible drilling site acceptable to the Forest service. The topographic map attached is the largest scale we could find. The outline of the lease is shown on this map.

We hereby declare that the only lease holder with 660 feet of this location is NATOMAS NORTH AMERICAN, Inc. AMERICAN HUNTER has been designated as Operator to drill this well under a farm-in agreement with NATOMAS. A copy of this designation is attached.

Yours truly,

AMERICAN HUNTER EXPLORATION LTD.



Don L. Myers
Senior Drilling Engineer

DLM:sfm

att

cc: Ben Meulenbeld
Vicky Frederick
Joe Straka



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
RICHFIELD DISTRICT OFFICE
150 EAST 900 NORTH
RICHFIELD, UTAH 84701

IN REPLY
REFER TO: 3100
(U-052)

November 30, 1983

State of Utah
Division of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

Gentlemen:

Enclosed are the Conditions of approval and the Survey and Lease Plats for American Hunter's Lion Mountain No. 1 well. The Application for Permit to Drill was approved by this office on November 23, 1983.

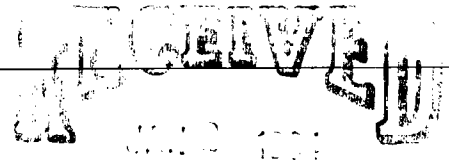
Sincerely,

District Manager

Enclosures:
Conditions of Approval
Plats (2)

American Hunter Exploration Ltd.
700, 435 - 4th Ave. S.,
Calgary, Alberta T2P 3A8
(403) 267-9511

american hunter



DIVISION OF
OIL, GAS & MINING

January 23, 1984

State of Utah
Division of Oil and Gas
4241 State Office Building
SALT LAKE CITY, Utah
U.S.A. 84114

ATTENTION: Mr. Norm Stout

Dear Mr. Stout:

We hereby request that all logs and other geological information which we provide the State related to our Lion Mountain #1 well in Wayne County, be held **confidential** for the maximum period. If there are any further questions, please call.

Yours truly,

AMERICAN HUNTER EXPLORATION LTD.

Don L. Myers
Manager, Drilling Engineering

DLM:sfm

cc: Wellfile

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER		5. LEASE DESIGNATION AND SERIAL NO. U-47729	
2. NAME OF OPERATOR American Hunter Exploration Ltd.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME n/a	
3. ADDRESS OF OPERATOR 500, 435 Fourth Avenue S.W. Calgary, Alberta T2P 3A8 CANADA		7. UNIT AGREEMENT NAME None	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface NW NE Sec. 19, T30S, R5E 1015' FNL and 1540' FEL of Sec. 19		8. FARM OR LEASE NAME Lion Mountain	
14. PERMIT NO. 43-055-30033		9. WELL NO. #1	
15. ELEVATIONS (Show whether OF, ST, OR, etc.) Ground 8653'		10. FIELD AND POOL, OR WILDCAT Wildcat	
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 19, T30S, R5E	
		12. COUNTY OR PARISH Wayne County	13. STATE UTAH

16. **Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF	<input type="checkbox"/>	PULL OR ALTER CASING	<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	MULTIPLE COMPLETE	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	ABANDON*	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	CHANGE PLANS	<input type="checkbox"/>
(Other)			

SUBSEQUENT REPORT OF:

WATER SHUT-OFF	<input type="checkbox"/>	REPAIRING WELL	<input type="checkbox"/>
FRACTURE TREATMENT	<input type="checkbox"/>	ALTERING CASING	<input type="checkbox"/>
SHOOTING OR ACIDIZING	<input type="checkbox"/>	ABANDONMENT*	<input type="checkbox"/>
(Other)	Abandonment of Zone		

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. **DESCRIBE PROPOSED OR COMPLETED OPERATIONS** (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Jan. 31/84 - Perforated Kaibab 4078' - 4085' KB./4 SPF/Total 28 shots.

- Swab tested well and recovered 107 bbls. water; no oil.

Feb. 1/84 - Received verbal approval to abandon from Bill Martin in Salt Lake City.

Feb. 2/84 - Set cement retainer at 4070' KB.
- Cement squeezed 50 sxs. class "H" cement + 2% CaCl₂ + 0.5% CF-10.
- Zone abandoned.

Accepted
APPROVED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING
DATE: 2/14/84
BY: Original signed by Ronald J. Firth

18. I hereby certify that the foregoing is true and correct

Norm Schonhoffer

SIGNED

Norm Schonhoffer

TITLE Completions Superintendent

DATE February 8, 1984

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER		5. LEASE DESIGNATION AND SERIAL NO. U-47729	
2. NAME OF OPERATOR American Hunter Exploration Ltd.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME n/a	
3. ADDRESS OF OPERATOR 500, 435 Fourth Ave. S.W., Calgary, Alberta, T2P 3A8 CANADA		7. UNIT AGREEMENT NAME None	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface NW NE Sec. 19, T30S, R5E 1015' FNL and 1540' FEL of Sec. 19		8. FARM OR LEASE NAME Lion Mountain	
14. PERMIT NO. 43-055-30033		9. WELL NO. #1	
15. ELEVATIONS (Show whether OF, RT, OR, etc.) Ground 8653'		10. FIELD AND POOL, OR WILDCAT Wildcat	
		11. SEC., T., R., M., OR B.L. AND SUBV. OR AREA Sec. 19, T30S, R5E	
		12. COUNTY OR PARISH Wayne County	13. STATE UTAH

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANN <input type="checkbox"/>	(Other) Abandonment of Zone <input type="checkbox"/>	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

Jan. 27/84 - Perforated White Rim SS. 4120' - 4140' KB./4 SPF/Total 80 shots.

- Swab tested well and recovered 77 bbls. of water; no oil.

Jan. 29/84 - Received verbal approval to abandon from Bill Martin in Salt Lake City.

Jan. 30/84 - Set cement retainer at 4110' KB.

- Cement squeezed 75 sxs. class "H" cement + 2% CaCl₂ + 0.5% CFN.

- Zone abandoned.

Accepted
APPROVED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING
DATE: 2/14/84
BY: Norm Schonhoffer

18. I hereby certify that the foregoing is true and correct

SIGNED Norm Schonhoffer TITLE Completions Superintendent DATE February 8, 1984

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. U-47729
2. NAME OF OPERATOR American Hunter Exploration Ltd.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME n/a
3. ADDRESS OF OPERATOR 500, 435 Fourth Ave. S.W., Calgary, Alberta, T2P 3A8 CANADA		7. UNIT AGREEMENT NAME None
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface NW NE Sec. 19, T30S, R5E 1015' FNL and 1540' FEL of Sec. 19		8. FARM OR LEASE NAME Lion Mountain
14. PERMIT NO. 43-055-30033		9. WELL NO. #1
15. ELEVATIONS (Show whether OF, RT, GR, etc.) Ground 8653'		10. FIELD AND FOOT, OR WILDCAT Wildcat
		11. SEC., T., R., M., OR B.L.K. AND SURVEY OR AREA Sec. 19, T30S, R5E
		12. COUNTY OR PARISH Wayne County
		13. STATE UTAH

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐FRACTURE TREAT ☐SHOOT OR ACIDIZE ☐REPAIR WELL ☐(Other) ☐FULL OR ALTER CASING ☐MULTIPLE COMPLETE ☐ABANDON* ☐CHANGE PLANS ☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐FRACTURE TREATMENT ☐SHOOTING OR ACIDIZING ☐(Other) Abandonment of Zone ☐REPAIRING WELL ☐ALTERING CASING ☐ABANDONMENT* ☐

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Feb. 3/84 - Perforated Kaibab 3997' - 4000' and 3986' - 3991' K.B./4 SPF/Total 32 shots.

- Swab tested well; no fluid recovered.

Feb. 4/84 - Acidized with 750 gals. 15% HCl.

Feb. 5 to - Swab tested well; recovered 32.15 bbls. formation water with a trace of oil.

Feb. 10/84

Feb. 11/84 - Set cement retainer at 3980' K.B. Cement squeezed perfs with 75 sxs.
Class "H" cement + 2% CaCl₂ + 0.5% CF-10. Spot 5 feet cement above retainer to 3975' K.B.

- NOTE: Verbal approval was obtained from Bill Martin in Salt Lake City on February 10/84.

- Zone abandoned.

CONFIDENTIAL

APPROVED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING
DATE: _____
BY: _____

18. I hereby certify that the foregoing is true and correct

SIGNED

Norm Schonhoffer

TITLE

Norm Schonhoffer

Completions Superintendent

DATE

February 13, 1984

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER ABANDONED <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. U-47729	
2. NAME OF OPERATOR American Hunter Exploration Ltd.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME n/a	
3. ADDRESS OF OPERATOR 500, 435 Fourth Ave. S.W., Calgary, Alberta T2P 3A8		7. UNIT AGREEMENT NAME None	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface NW NE Sec. 19, T30S, R5E 1015' FNL and 1540' FEL of Sec. 19		8. FARM OR LEASE NAME Lion Mountain	
14. PERMIT NO. 43-055-30033		9. WELL NO. #1	
15. ELEVATIONS (Show whether OF, RT, OR, etc.) Ground 8653'		10. FIELD AND POOL, OR WILDCAT Wildcat	
		11. SEC., T., R., M., OR BLE. AND SURVEY OR AREA Sec. 19, T30S, R5E	
		12. COUNTY OR PARISH Wayne Cty.	
		13. STATE UTAH	

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETION <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input checked="" type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	(Other) <input type="checkbox"/>

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Feb. 12/84 - Perforated Sinbad 3810' - 3834' 1/4" HSC csg. gun/4 SPF
- Swab tested well; no fluid recovered.

Feb. 13/84 - Acidized with 750 gals. 15% HCl.

Feb. 16/84 - Acidized with 3000 gals. 15% HCl.

Feb. 17 to

Feb. 22/84 - Swab tested; very little inflow. Had traces of oil.

Feb. 22/84 - Set Bridge Plug at 3794' KB.

- Pressure tested plug to 2000 psi.; held good.

- Ran 3 cement plugs from 3972' - 3772', 1800' - 1600', 875' - 675'.

- Dumped 6 bbls. cement down surface casing annulus.

- Cut off 9 5/8" and 5 1/2" csg. 3 feet below ground.

- Placed 10 foot cement plugs in 9 5/8" and 5 1/2" casings.

- Welded plate on casing.

- Back-filled cellar.

NOTE: Verbal approval received from Bill Martin in Salt Lake City on February 21, 1984.

18. I hereby certify that the foregoing is true and correct
SIGNED Norm Schonhoffer TITLE Completions Superintendent DATE March 12, 1984

(This space for Federal or State office use)

APPROVED BY _____
CONDITIONS OF APPROVAL, IF ANY:

TITLE _____

APPROVED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING

DATE: _____

BY: _____

American Hunter Exploration Ltd.
700, 435 - 4th Ave. S.W.
Calgary, Alberta T2P 3A8
(403) 260-1000

RECEIVED

JUN 8 1984

american hunter

DIVISION OF OIL
GAS & MINING

June 1, 1984

CONFIDENTIAL

State of Utah Natural Resources
Oil, Gas & Mining
4241 State Office Building
Salt Lake City, UT 84114

ATTENTION: Norman C. Stout
Administrative Assistant

Dear Sir:

RE: Lion Mountain #1, API #43-055-30033,
NW NE Sec. 19, T. 30S, R. 5E

The well noted above was officially Plugged and Abandoned by verbal approval February 21, 1984 and the paperwork was filed March 12, 1984; copy attached.

Yours truly,



G. Wayne Anderson
Senior Production Accountant

GWA/lcv
Encl.



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dianne R. Nielson, Ph.D., Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

June 8, 1984

American Hunter
700, 435 - 4th Ave. S.W.
Calgary, Alberta T2P 3A8

Gentlemen

SUBJECT: WELL COMPLETION REPORT LION MOUNTAIN #1

This letter is to advise you that the "Well Completion or Recompletion Report and Log" for the Lion Mountain #1 Well, API #43-055-30033, Sec. 19, T. 30S., R. 5E., Wayne County, Utah is due and has not been filed with this office as required by our rules and regulations.

Please complete the enclosed Form OGC-3 and forward it to this office as soon as possible.

We will be happy to acknowledge receipt of your response to this notice if you will include an extra copy of the transmittal letter with a place for our signature and a self addressed envelope for the return. Such acknowledgement should avoid unnecessary mailing of a second notice from our agency.

Thank you for your prompt attention to the above matter.

Sincerely

Claudia L. Jones
Well Records Specialist

clj
Enclosure

cc Dianne R. Nielson
Ronald J. Firth
John R. Baza
File

American Hunter Exploration Ltd.
700, 435 - 4th Ave. S.W.
Calgary, Alberta T2P 3A8
(403) 260-1000

american hunter

June 22, 1984

State of Utah
Natural Resources
4241 State Office Building
Salt Lake City, Utah, 84114

Attention: Claudia L. Jones
Well Records Specialist

Dear Ms. Jones:

Re: Well Completion or Recompletion
Report and Log - Lion Mountain #1

As per your letter request of June 8, 1984, please find the required form, in duplicate, for the subject well. Also, attached is a chronological Drilling History, Completion Report, and Lithological log.

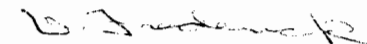
We are sorry for the delay, but were unsure as to the necessity of the form. We had previously submitted Sundry Notices which indicated the abandonment of each completed zone and the subsequent abandonment of the well.

Should you have any further questions, please do not hesitate to contact Ray Shepert at (403) 260-1824 or the undersigned at (403) 260-1852.

Please acknowledge receipt by signing and returning the duplicate of this letter. We have included a self-addressed envelope for your convenience.

Sincerely,

AMERICAN HUNTER EXPLORATION LTD.



V. Frederick
Drilling Technician

Attachment

cc: Ray Shepert

Received by: S. Barola

Date: _____

Reply sent 6-27-84

STATE UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> Other <u>ABANDONED</u>				5. LEASE DESIGNATION AND SERIAL NO. U-47729	
b. TYPE OF COMPLETION: NEW WELL <input type="checkbox"/> WORK OVER <input type="checkbox"/> DEEP-EN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> Other _____				6. IF INDIAN, ALLOTTEE OR TRIBE NAME n/a	
2. NAME OF OPERATOR American Hunter Exploration Ltd.				7. UNIT AGREEMENT NAME None	
3. ADDRESS OF OPERATOR 500, 435 Fourth Avenue S.W. Calgary, Alberta T2P 3A8				8. FARM OR LEASE NAME Lion Mountain	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface NW NE Sec. 19, T30S, R5E At top prod. interval 1015' FNL + 1540' FEL of Sec. 19 At total depth Same				9. WELL NO. #1	
14. PERMIT NO. 43-055-30033				DATE ISSUED Oct. 27/83	
15. DATE SPUDDED 83-12-13		16. DATE T.D. REACHED 84-01-06		10. FIELD AND POOL, OR WILDCAT Wildcat	
17. DATE COMPL. (FROM TO) 83-12-13 Jan. 26 - Feb. 24/84		18. ELEVATIONS (DF, RES, RT, GR, ETC.)* GR.8653' KB.8677.6'		11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA Sec. 19, T30S, R5E	
20. TOTAL DEPTH, MD & TVD 4240' T.D.		21. PLUG, BACK T.D., MD & TVD Surface		12. COUNTY OR PARISH Wayne Cty.	
22. IF MULTIPLE COMPL., HOW MANY* 3 zones		23. INTERVALS DRILLED BY → 0 - 4240'		13. STATE UTAH	
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* N/A					19. ELEV. CASINGHEAD Ground
26. TYPE ELECTRIC AND OTHER LOGS RUN BHCS, DI-SFL, LDT-CNL, HDT, NGT <u>mud</u>					25. WAS DIRECTIONAL SURVEY MADE No
27. WAS WELL CORED Yes - 3 cores cut					
28. CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9 5/8"	36#/ft.	804.67'	13 1/2"	365sx.+2%CaCl2+2#/sk.hi-seal	-
				Tail 135sx."H"+2%CaCl2	
5 1/2"	17#/ft.	4240'	8 3/4"	190sx.+1%CF10+2#/sk.hi-seal	-
				Tail 320sx."H"+.5%CF10+2#/sk.hi-seal	
29. LINER RECORD			30. TUBING RECORD		
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE
N/A					DEPTH SET (MD)
					PACKER SET (MD)
31. PERFORATION RECORD (Interval, size and number) See attached Completion History			32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC. DEPTH INTERVAL (MD) See attached Completion History AMOUNT AND KIND OF MATERIAL USED		
33.* N/A PRODUCTION					
DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)			WELL STATUS (Producing or shut-in) <u>Producing</u>
DATE OF TEST	HOURS TESTED	CHOKER SIZE	PROD'N. FOR TEST PERIOD →	OIL—BSL.	GAS—MCF.
FLOW. TUBING PRES.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BSL.	GAS—MCF.	WATER—BSL.
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)					TEST WITNESSED BY
35. LIST OF ATTACHMENTS Drilling History, Completion History, Lithological log					
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records					
SIGNED <u>Rm Hunter</u>		TITLE <u>Drilling Superintendent</u>		DATE <u>June 22, 1984</u>	

*(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on Items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see Item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in Item 22, and in Item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in Item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for Items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:

SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; COSED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
KAIBAB	3990	4040.5	Core #1: Recovered 50.5'.
	4040.5	4080.5	Core #2: Recovered 38'.
	4080.5	4129.3	Core #3: Recovered 50.6'.
			No Drill Stem Testing done.
			See attached Drilling History.

38.

GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH
Navajo	848	848
Kayenta	1861	1861
Wingate	2283	2283
Chinle	2596	2596
Shinarump Cgl.	3010	3010
Moenkopi Clyst.	3055	3055
Sinbad	3118	3118
Black Dragon	3759	3759
Kaibab	3885	3885
White Rim	4119	4119
Note: Max. deviation was $\frac{1}{2}$ " at 4200'.		

AMERICAN HUNTER/LION MOUNTAIN # 1

84-02-17 (23) Sinbad 0730 hrs SIP zero. Rig Western to acidize. Pump 20,000 SCF of nitrogen pad volume ahead of acid at 400 PSI. Pump 3000 gals of 15% HCL with surfactant and iron sequestering agent and ball ball sealers nitrified with 750 SCF of nitrogen per bbl. Pump at 4 BPM at 1300 PSI. Flush with nitrogen. Slight ball action. Final pump pressure 1700 PSI. ISIP 1700 PSI bleeding to 1575 PSI in 15 mins. Bled pressure off to zero in 90 mins on 3/8" choke. Install BOP. Rig to swab. Fluid level at 2600 ft. Pull 8 swabs to recover 28.8 bbls of spent acid water with traces of formation oil and heavy solids. Final fluid level at 3820 ft. Shut in at 1800 hrs. LFLTR = 54.6 bbls. (GAMACHE # 14) (179,655)

84-02-18 (24) Sinbad Swabbing. (GAMACHE # 14)
0730 hrs SIP 75 PSI. Bled down nitrogen and acid gas. Rig to swab. Fluid level 3747 ft. Pulled 7 swabs to recover 10.7 bbls fluid. First swab 10% oil and 87.5 % water and 2% solids. Final swab trace of oil and 4% solids and 96% water. Average swab rate 1 bbls per hour. Oil very black and tarry. Fluid level remaining between 3820 - 3875 ft on last 3 swabs. LFLTR 44 bbls. SDFN at 1800 hrs. (182,655)

84-02-19 (25) Sinbad Swabbing (GAMACHE # 14)
0730 hrs SICP 150 PSI. Bled off nitrogen and formation gas. Rig to swab. Fluid level @ 3775 ft. Perforation at 3810 - 3834 ft. Pulled 6 swabs to recover 7.5 bbls. First swab 5% oil and 3% solids and 92% formation water with density of 8.4 PPG and salinity of 69,600 PPM. Final swab trace of oil with 4% solids and 96% formation water with density of 8.4 PPG and salinity of 73,200 PPM. Fluid level remained at 3850 - 3950 ft during swabs. LFLTR 36.5 bbls. Shut In at 1800 hrs. (185,755)

84-02-20 (26) Sinbad Swabbing. (GAMACHE # 14)
0800 hrs SIWHP 30 PSI. IFL 3825' KB. Pulled 6 swabs over 9 hours to recover 3.14 bbls fluid. FFL @ 3970' KB. Last 2 swabs dry. Oil cut 1-2% on each swab. LFLTR 33.32 bbls. (188,655)

84-02-21 (26) Sinbad Swabbing. (GAMACHE # 14)
0800 hrs SIWHP = 40 PSI. IFL 3900'. Pulled 6 swabs over 9 hrs to recover 2.18 bbls fluid. FFL @ 3940' KB. Swab # 1 contained 20% oil, # 2,3,4 trace of oil. Swabs 5 and 6 were 100% water. Water salinity on last swab 64800 ppm, 8.6#/gal. SIFN. (191,655)

84-02-22 (27) Sinbad Preparing to abandon. (GAMACHE # 14)
0730 hrs slight blow on wellhead. IFL @ 3950' KB. Pulled 4 swabs over 6 hrs to recover 0.31 bbls fluid with trace of oil. FFL @ 3970' KB. LFLTR = 30.83 bbls. (194,355)

84-02-24 (29) Sinbad Cut off 9 5/8 and 5 1/2 casings 3 feet below ground. Place 10 feet of cement plug in 9 5/8 and 5 1/2 casings. Weld plate on 9 5/8 casing. Backfill hole. Loaded out tubing. Move out rig and equipment.

FINAL REPORT!

- 84-02-10 (16) Kaibab K-4 Running BHP Recorders. (GAMACHE # 14)
0800 hrs FL @ 3790' KB. Pulled 22 swabs over 10 hrs to recover 12.81 bbls fluid. All swabs between 1% and 3% oil cut. Water salinity fairly steady @ 28000 PPM. New fluid recovered 28.15 bbls. (136,865)
- 84-02-11 (17) Kaibab K-4 Pulling recorders. (GAMACHE # 14)
0800 Hrs fluid level @ 3650'KB. Pulled 8 swabs over 2 hrs to recover 5 bbls fluid with trace of oil. RIH w/ BHP recorders to 3993' KB. Recorders on bottom @ 0950 hrs. S.I. for B.U. New fluid recovered 32.15 bbls. (139,565)
- 84-02-12 (18) Kaibab K-4 Swabbing casing. (GAMACHE # 14)
Pull BHP recorders. Pressure after 23.25 hrs. 143 PSI. Stable last 11.25 hrs. Unseat packer and POH w/ tubing. Rig Pomeranke and set cement retainer @ 3980'KB. Pressure test to 1500 PSI. Held O.K. RIH with stinger and stab into retainer. Est. feed rate of 1.5 BPM @ 1000 PSI. Batch mix 75 sxs class "H" cement + 2% CaCl_2 + .5% CF 10 and squeeze 11 bbls cement to formation w/press increasing to 2000PSI. No loss in 5 mins. Pull out of retainer and spot 5' cement above retainer. Backwash excess cement. POH w/tubing. SIFN. (150,455)
- 84-02-13 (19) Sinbad K-2 Preparing to acidize. (GAMACHE # 14)
Swab casing to 3840' KB. Rig Pomrenke and perforate Sinbad interval 3810' - 3834' KB w/4" HSC casing gun @ 4 SPF. Slight air blow after perforating. No fluid rise indicated. Pulled 4 swabs over 4 hrs w/no fluid recovery. SIFN. (156,255)
- 84-02-14 (20) Sinbad K-2 Swabbing. (GAMACHE # 14)
RIH w/tubing and packer. Set packer w/tailpipe @ 3803'KB. Acidize with 750 gals HCL + surfactant + non-emulsifier. Pump acid down tubing w/pressure increase to 700 PSI. S.I. and pressure bled to zero PSI in 2 mins. Chase acid w/4.2 bbls and pressure to 400 PSI. Pressure bled to zero PSI in 2 mins. Pump remaining acid @ 2.5 BPM @ 650 PSI. ISIP 500 PSI bleeding to zero PSI in 1 min. Unseat packer and POH. Rig to csg swab. IFL @ 2550'KB. Pulled 8 swabs in 3 hrs to recover 27.49 bbls load and acid water. FFL @ 3800'. LFLTR 14.31 bbls. (161,855)
- 84-02-15 (21) Sinbad K-2 Acidizing. (GAMACHE # 14)
0800 Hrs SIWHP: 50 PSI. Bleed off acid gas. IFL: 3775; KB. Pulled 6 swabs throughout day to recover 2.93 bbls reddish brown acid water. Swab casing sump to 3955' KB. LFLTR: 11.38 bbls. (164,455)
- 84-02-16 (22) Sinbad Acidizing. (GAMACHE # 14)
0700 SIP zero. Rig to swab. Tag fluid @ 3950 ft. Pull 1 swab to recover 15 gals load fluid. No oil show. Rig out swab equipment. Install wellhead. Rig in Western equipment to acidize. (166,955)

AMERICAN HUNTER/LION MOUNTAIN # 1

- 84-02-04 (10) Kaibab K-4 Acidizing. (GAMACHE #14)
Swab casing to 3780'KB. Perforate Kaibab K4 interval 3997 - 4000 and 3986 - 3991'KB using 4" HSC casing gun @ 4SPF. Total 32 shots
No fluid rise recorded. Pulled 4 swabs over 4 hours to recover 4.5 bbls load fluid. No fluid entry. RIH w/ 2.25 "R" nipple, 1 jt 2 7/8" tubing, packer, 4' pup, 2.25 "F" nipple on 2 7/8" to 4002' KB. SIFB. (113,049)
- 84-02-05 (11) Kaibab K-4 Swabbing. (GAMACHE #14)
No pressure in A.M. Circ hole to diesel. No water returns. Rig to acidize w/750 gals 15% HCL + surfactant + non-emulsifier + inhibitor. Wash 3 bbls from 300 PSI to 1000 PSI w/250 - 300 PSI bleed off on first 4 washes and well bleeding to zero PSI in 10 mins on 5th wash. Pump 15 bbls @ 1 BPM @ 1375 PSI. ISIP 1375 PSI bleeding to zero PSI in 4 mins. Start back wash acid. Pump 8 bbls, lost returns. Pick up and set packer @ 3948' KB w/"R" nipple @ 3992'KB and "F" nipple @ 3942'KB. PT to casing to 1000 PSI. Held O.K. Rig to swab. IFL @ 2500' KB. Pulled 6 swabs over 5 hrs to recover 13.61 bbls load fluid. FFL @ 3800'. LFLTR 29.39 bbls. S.I. @ 1800 Hrs. (120,699)
- 84-02-06 (12) Kaibab K-4 Swabbing. (GAMACHE # 14)
0800 hrs IFL @ 3650' KB. Pulled 20 swabs over 10 hrs to recover 13.12 bbls fluid. First 9 swabs were 100% diesel, next 7 swabs had mostly diesel w/ trace of water. Last 3 swabs contained approx. 85% water and 15% diesel cut oil. LFLTR 16.27 bbls. Water salinity by refracometer is 175,000 PPM - possible acid water. (124,199)
- 84-02-07 (13) Kaibab K-4 Swabbing. (GAMACHE # 14)
0800 Hrs IFL @ 3750' KB. Pulled 17 swabs to recover 7.18 bbls fluid. Swab # 1 consisted of 85% Diesel cut oil. Remaining swabs fluctuated between 2% and 15% oil. Oil appears black and viscous. Water is high salinity and probably still acid water. LFLTR: 9.09 bbls. (126,899)
- 84-02-08 (14) Kaibab K-4 Swabbing. (GAMACHE # 14)
0800 hrs FL @ 3750'KB. Pulled 20 swabs to recover 10.38 bbls fluid. Swab # 1 consisted of approximately 35% oil and 65% water. Remaining swabs cut between 1% and 5% oil. Water salinity dropping steadily throughout day from 146,000 PPM on 1st swab to 82,000 PPM on last swab. New fluid recovered 1.29 bbls. (130,199)
- 84-02-09 (15) Kaibab K-4 Swabbing. (GAMACHE # 14)
0800 Hrs FL @ 3650' KB. Pulled 21 swabs over 10 hrs to recover 14.05 bbls fluid. Swab # 1 had 15% oil and 85% water. Remaining swabs ranged between 3% and 5% oil. Water salinity dropping steadily to 37,500 PPM on last swab. New fluid recovered: 14.05 bbls. (133,565)

COMPLETION HISTORY

AMERICAN HUNTER/LION MOUNTAIN # 1

- 84-01-26 (1) Running tubing. (GAMACHE #14)
Move in rig and equipment and R.U. Off load 134 jts, 2 7/8 tubing and wellhead. Cut and dress 5 1/2 csg. Install tbg spool and BOP's. Pick up 4 3/4 bit and csg scraper and RIH w/37 jts tbg. SIFN. (19,500)
- 84-01-27 (2) Finish RIH w/2 7/8" tublg to PBTD @ 4189 mKB. Displace hole to Diesel. POH. R.U. Pomrenke Wireline and run CBL-VDL from PBTD to 3300' KB. Make pressure pass w/1000 PSI. Pressure test casing to 3000 PSI. Held O.K. (30,930)
- 84-01-28 (3) W/Rim SS Swabbing. (GAMACHE #14)
Swab casing to 3925'KB. Perforate White Rim SS from 4120 - 4140' KB w/4" HSC csg gun @ 4 SPF. Total 80 shots. FL rose to 3850' in 1 1/4 hrs. Rig to swab. Pulled 5 swabs over 2 3/4 hrs to recover 11.5 bbls fluid consisting of 5.5 bbls load diesel and 6 bbls new water. 3rd swab had trace of oil. FFL @ 4000'. SIFN @ 1800 hrs. (66,485)
- 84-01-29 (4) W/Rim SS Pull recorders. (GAMACHE # 14)
0800 hrs FL @ 3865' KB. Pulled 11 swabs over 10 hrs to recover 63 bbls water. FL staying between 3800 - 3875' KB throughout day. All swabs were 100% water except swab # 1 which had 2% oil cut on grind out. Salt content from refractometer was 1948 PPM. Collect water samples. Run tandem 1000 PSI recorders to 4130' KB. On bottom @ 2145 hrs. (69,889)
- 84-01-30 (5) W/Rim SS Set cement retainer. (GAMACHE # 14)
Pull BHP recorders and read as follows:
- | TIME | PRESSURE (PSI) |
|--------|----------------|
| 0 | 179 |
| 15 min | 181 |
| 30 | 183 |
| 45 | 183 |
| 1 hour | 184 |
| 2 | 186 |
| 3 | 187 |
| 4 | 188 |
| 5 | 189 |
| 6 | 189 |
| 7 | 190 |
| 8 | 191 |
| 9 | 191 |
| 10 | 192 |
| 11 | 192 |
| 12 | 193 |
- Pulled 1 swab from 4100' to recover 7.5 bbls 100% water. IFL @ 3675'. S.I. well. Total new fluid recovered: 77 bbls. (73,799)

AMERICAN HUNTER/LION MOUNTAIN # 1

84-01-31 (6) W/Rim SS Pull tubing. (GAMACHE # 14)
 Rig wireline and run gauge ring to 4120' KB. RIH and set Model K cement retainer @ 4110' KB. Fill hole with water and PT retainer to 2500 PSI. Pick up stinger and RIH w/2 7/8 tubing. Stab retainer and est. feed rate of 2 BPM @ zero PSI. Pull out of retainer and mix 75 sxs Class "H" cement + 2% CaCl₂ + 0.5% CFN - total of 15.8 bbls slurry. Circ. cement to bottom of tubing and stab retainer. Well on vacuum. 8 bbls of cement in formation in 15 mins. Stage tool 7 bbls slurry over 2 hrs final pressure of 200 PSI. Pull out of retainer and backwash approx. 1/4 bbls excess cement. Displace hole to diesel. SIFN. (83,739)

84-02-01 (7) Kaibab(K40)Swabbing. (GAMACHE # 14)
 POL with tubing. Swab casing to 3675' KB. Rig wireline and perforate K40 Interval 4078 - 4085 w/4" HSC casing gun @ 4SPF. Total 28 shots. FL rose 35' in 25 mins. Rig to swab. Pulled 7 swabs over hrs to recover 10 bbls load diesel and 27.5 bbls new fluid. Swab # 4 contained 12% heavy gauge oil. Swab # 5 contained 5% oil as above. Swabs 6 & 7 100% water w/slight trace of oil. FFL @ 3900'. SIFN. (90,614)

84-02-02 (8) Kaibab K40 Set cement retainer. (GAMACHE # 14)
 0800 Hrs FL @ 3555'KB. Pulled 23 swabs over 9 hrs to recover 79 3/4 bbls water. FL steady between 3800 - 3900'KB. Water had strong odor - sewage gas or sulphur. Total new water recovered 107 1/4 bbls. RIH w/tandem BHP recorders to 4081.5'KB @ 1730 hrs. Pull recorders @ 0730 hrs. Build up as follows:

TIME (Hrs)	PRESSURES (PSI)
0	89
.5	136
1	151
1.5	162
2	168
2.5	171
3	173
4	177
5	177
6	177
8	178
10	178
12	178
14	179

(93,914)

84-02-03 (9) Kaibab Swabbing. (GAMACHE # 14)
 Pull recorders. Field read sheets. BHP 179 PSI. Set Baker Model "K" cement retainer at 4070'. RIH with stinger on 2 7/8" tubing. Set into retainer. Establish feed rate at 1 bbl/min at 1000 PSI. Pull out of retainer. Batch mix 50 sxs of Class "H" cement + 2% CaCl₂ + .05% CF-10. Slurry volume 11 bbls. Circulate cement to bottom. Set into retainer. Stage squeeze 3 bbls of cement to formation to a standing pressure of 2500 PSI. Pull 3.5' out of retainer. Backwash cement. POH. Rig to swab. Swab 30 bbls. SDFN. (105,959)

DRILLING HISTORY

AMERICAN HUNTER/LION MOUNTAIN # 1, SEC. 19, T30S, R5E, WAYNE COUNTY, UTAH

84-01-07 (26)	4240 Ft	Tear out BOP's. Progress: Nil Ran 107 jts 5 1/2", 17#, K-55, Rge 3, LT&C csg. Total Length 4246.45 Ft. Landed @ 4240 Ft. Cemented w/ 190 sxs Lite + .1% CF + 2#/sack Hi-Seal followed by 320 sxs "H" + .5% CF-10 + 2#/sack Hi-Seal. Plug Down Time: 01:45 Hrs 84-01-07 RIG RELEASE: CASED POTENTIAL KAIBAB & SINBAD GAS & OIL WELL. R/R 09:45 Hrs 84-01-07.	(LOFF # 5) (483,640)
84-01-08 (27)	4240 Ft	Rig released. Moving rig into Torrey. NB: Please note correction in cost (\$30,000)	(LOFF # 5) (452,810)

DRILLING HISTORY

AMERICAN HUNTER/LION MOUNTAIN # 1, SEC. 19, T30S, R5E, WAYNE COUNTY, UTAH

83-12-27 (15)	3689 Ft Moenkopi	Mix Mud & LCM Progress: Nil RIH w/ free point, pipe free @ 2570', top of DC's 80% stuck @ 2901'. POH. Rec. all drill pipe, cross over subs, inspect DS's thread - O.K.	(LOFF # 5) (291,815)
83-12-28 (16)	3689 Ft Moenkopi	RIH w/ jars Progress: Nil	(LOFF # 5) (300,336)
83-12-29 (17)	3689 Ft Moenkopi	Clean to bottom Progress: Nil RIH to top of fish @ 2901'. Mud lines & kelly frozen.	(LOFF # 5) (326,548)
83-12-30 (18)	3689 Ft Moenkopi	Ream with aireated mud. Progress: Nil Thaw out lines.	(LOFF # 5) (336,401)
83-12-31 (19)	3886 Ft B/Dragon	Drilling. Progress: 197 Ft	(LOFF # 5) (346,622)
84-01-01 (20)	3990 Ft Kaibab	RIH w/core barrel. Progress: 104 Ft	(LOFF # 5) (344,916)
84-01-02 (21)	4040 Ft Kaibab	Coring Progress: 50 Ft	(LOFF # 5) (353,655)
84-01-03 (22)	4070 Ft Kaibab	Coring. Progress: 30 Ft <u>Core # 1:</u> 3990' - 4040.5' (Kaibab) Rec. 50.5'.	(LOFF # 5) (361,871)
84-01-04 (23)	4129 Ft Kaibab	Cutting Core # 3. Progress: 59 Ft <u>CORE # 2:</u> (Kaibab) 4040.5 - 4080.5' Cut 40' Rec. 38'	(LOFF # 5) (378,215)
84-01-05 (24)	4140 Ft W/Rim	POH to log. Progress: 111 Ft	(LOFF # 5) (402,833)
84-01-06 (25)	4240'	Rig up & lay down pipe. Progress: Nil Should be running casing by noon. CORE # 3: 4080.5' - 4129.3' Rec: 50.6' NOTE: CORE # 2: recovered 1.8 ft of core.	(LOFF # 5) (427,982)

DRILLING HISTORY

AMERICAN HUNTER/LION MOUNTAIN # 1, SEC. 19, T30S, R5E, WAYNE COUNTY, UTAH

83-12-16 (4)	673' Carmel	Drilling. Progress: 205' 626' - 1 1/2°	(LOFF. 5)
83-12-17 (5)	806' Carmel	Rig to run casing. Progress: 133'	(LOFF # 5) (131,292)
83-12-18 (6)	804' Carmel	Heading up BOP's Progress: Nil Ran 21 jts 9 5/8", 36#, K-55, 8 rd, LT&C Csg. Total Length - 824.73'. Landed @ 804.67'. Cemented w/ 365 sxs + 2% CaCl ₂ + 2# Hi-Seal Slurry weight 12.9 #/gal. Followed by 135 sxs "H" +2% CaCl ₂ slurry, 15.9 #/gal. Ran 100% excess casing @ corrected depth of 804'.	(LOFF #5) (202,003)
83-12-19 (7)	804'	RIH w/drill collars. Progress: Nil.	(LOFF # 5) (212,185)
83-12-20 (8)	1205' Navaho	Drilling. Progress: 401' 1001' - 1 3/4°	(LOFF # 5) (219,825)
83-12-21 (9)	1737' Navaho	Drilling w/mud. Progress: 532'	(LOFF # 5) (230,750)
83-12-22 (10)	1987' Kayenta	Drilling. Progress: 250' 1971 - 1 1/2°	(LOFF # 5) (246,850)
83-12-23 (11)	2721' Chin Lee	Drilling. Progress: 734' Chin Lee @ 2598' (30' low according to geologist)	(LOFF # 5) (255,560)
83-12-24 (12)	3155 Ft Moenkopi	Trip for bit. Progress: 434 Ft	(LOFF # 5) (263,398)
83-12-25 (13)	3370 Ft Moenkopi	Drilling. Progress: 215 Ft	(LOFF # 5) (274,800)
83-12-26 (14)	3689 Ft Moenkopi	Trip for W/O Progress: 319 Ft	(LOFF # 5) (283,222)

DRILLING HISTORY

AMERICAN HUNTER/LION MOUNTAIN # 1, SEC. 19, T30S, R5E, WAYNE COUNTY, UTAH

83-12-01		Location construction. Levelling location, rigging sump.	(LOFF # 5) (4,620)
83-12-02		Constructing location. Levelling location - rat holers today.	(LOFF. # 5) (7,245)
83-12-03		Build location	(LOFF # 5) (9,345)
83-12-04		Build road from lease to Forestry Road.	(LOFF # 5)
83-12-05		Digging rathole Move rig tomorrow morning	(LOFF # 5) (12,940)
83-12-06		Finish rathole and mousehole @ 1:00 P.M. Turn over to Loffland # 5)	(LOFF # 5) (24,562)
83-12-07		Rigging up.	(LOFF # 5) (69,344)
83-12-08		Rigging up.	(LOFF # 5) (70,424)
83-12-09		Rigging up.	(LOFF # 5) (72,324)
83-12-10		RURT 80% rigged up.	(LOFF # 5) (74,377)
83-12-11		RURT	(LOFF # 5) (75,264)
83-12-12		Rig up and repair rig.	(LOFF # 5) (78,377)
83-12-13 (1)	55' Gravel	Drilling Progress: 55' SPUD IN TIME: 02:30 Hrs 83-12-13	(LOFF # 5) (96,137)
83-12-14 (2)	243' Glacial	Drilling surface hole Progress: 209' Drilling very rough, 152 - 1 3/4°	(LOFF # 5) (104,517)
83-12-15 (3)	464' Carmel	Drilling. Progress: 221'	(LOFF # 5) (112,212)